

Public Utilities

FORTNIGHTLY



April 23, 1942

WHAT CAN AMERICAN UTILITIES LEARN FROM BRITISH WAR EXPERIENCE?

By Davis M. DeBard

“ ”

The New Order Comes to Middletown

By Herbert Corey

“ ”

Is Silver a Public Utility?

By Herbert M. Bratter

“ ”

Fair Value Must Still Support the Rate Base

By Edwy L. Taylor

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS

BRAVE MR. DEXTER



**"MR. DEXTER HAS KINDLY VOLUNTEERED
TO RUN OUR SWITCHBOARD"**

Fortunately in many public utility industrial plants, safe, modern I-T-E switchboards have replaced old, hazardous ones. For the I-T-E boards Mr. Dexter needs neither his strange apparel nor his special bravery.

I-T-E CIRCUIT BREAKER CO.

**AIR CIRCUIT BREAKERS AND SWITCHGEAR
19th & HAMILTON STREETS, PHILADELPHIA, PA.**



This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

R

th

th

th

th

th

th

th

ty

sw

sty

no

spo

th

th

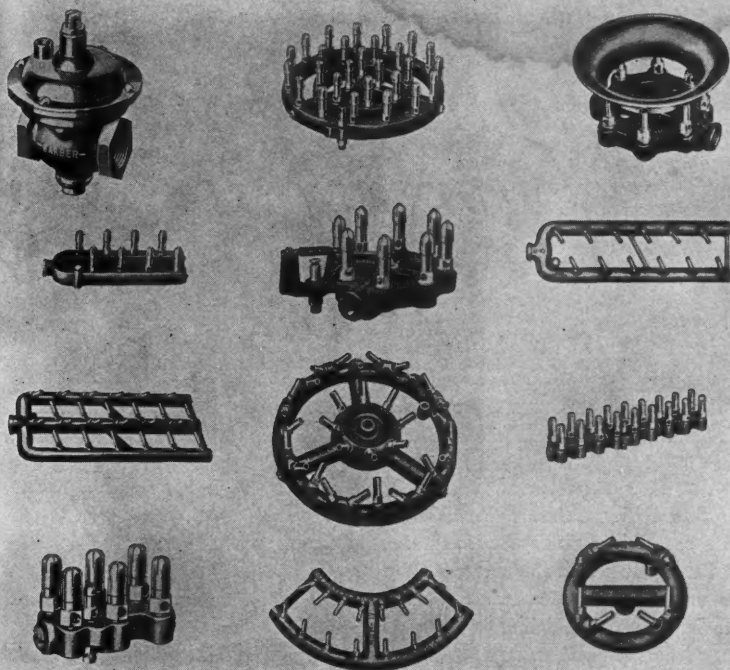
th



April 2

B

TH



BURNERS FOR ALL GAS APPLIANCES

● Under the stress of national emergency, engineering resourcefulness in the gas appliance field is now at a greater premium than ever. With the necessity for conservation of every type of gas fuel, as well as materials for the manufacture of gas burning equipment, there has arisen a more imperative demand than ever before for EFFICIENCY.

Barber will design, under laboratory control, the proper type and size burner unit to suit your particular appliance, and for natural, manufactured, Butane, or bottled gas. We are gas burner specialists, and offer you our engineering and plant facilities for the development and manufacture of burner units for your specific purposes. Write for new Catalog 42, illustrating and listing many types of burners for Appliances, Gas Burners for Furnaces and Boilers, Regulators, etc.

THE BARBER GAS BURNER CO., 3704 Superior Avenue, Cleveland, Ohio

BARBER BURNERS

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Editor—HENRY C. SPURR
Associate Editors—ELLSWORTH NICHOLS, FRANCIS X. WELCH, NEIL H. DUFFY
Financial Editor—OWEN ELY
Assistant Editors—M. C. MCCARTHY, A. R. KNIGHTON

Public Utilities Fortnightly



VOLUME XXIX

April 23, 1942

NUMBER 9

Contents of previous issues of PUBLIC UTILITIES FORTNIGHTLY can be found by consulting the "Industrial Arts Index" in your library.

Utilities Almanack	529
Oil Fields	(Frontispiece) 530
What Can American Utilities Learn from British War Experience?	Davis M. DeBard 531
The New Order Comes to Middletown	Herbert Corey 541
Is Silver a Public Utility?	Herbert M. Bratter 549
Fair Value Must Still Support the Rate Base	Edwy L. Taylor 554
Wire and Wireless Communication	556
Financial News and Comment	Owen Ely 560
What Others Think	566
General Electric's Post-war World The ODT Takes Over Transit Regulation The Telephone Man Is Called to the Colors Are Assurances from the Government for Continuation of the Profit System in Order?	576
The March of Events	586
The Latest Utility Rulings	593
Public Utilities Reports	594
Titles and Index	

Advertising Section

Pages with the Editors	6
In This Issue	10
Remarkable Remarks	12
Industrial Progress	34
Index to Advertisers	52

Q This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

PUBLIC UTILITIES REPORTS, INC., PUBLISHERS

Publication Office Candler Building, Baltimore, Md.
Executive, Editorial, and Advertising Offices Munsey Building, Washington, D. C.

PUBLIC UTILITIES FORTNIGHTLY, a magazine dealing with the problems of utility regulation and allied topics, including also decisions of the regulatory commissions and courts, preprinted from *Public Utilities Reports, New Series*, such Reports being supported in part by those conducting public utility service, manufacturers, bankers, accountants, and other users. Entered as second-class matter April 29, 1915, under the Act of March 3, 1879. Entered at the Post Office at Baltimore, Md., Dec. 31, 1936; copyrighted, 1942, by Public Utilities Reports, Inc. Printed in U. S. A.

PRICE, 75 CENTS A COPY

ANNUAL SUBSCRIPTION, \$15.00

APR. 23, 1942

No Wrench Housing Troubles with the Guaranteed **RIGID**



YOU CAN'T AFFORD to waste time repairing pipe wrenches these days. **RIGID**s are the answer—millions of them have proved it! That guarantee means no time lost to repair housings . . . no delays . . . no expense . . . no bother! And it's a faster, easier tool to use. Handy pipe scale on chrome molybdenum hookjaw, adjusting nut in open housing *spins* to size, powerful I-beam handle is a comfort to the hand. . . Save time, work, money—ask for the **RIGID** at your Supply House.

THE RIDGE TOOL COMPANY - ELYRIA, OHIO, U. S. A.



Pipe Wrenches, Cutters, Threaders, Vises

Work-Saver Tools for America's Big Job in 1942



All **RIGID** Pipe
Tools are sold
through Supply Houses

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

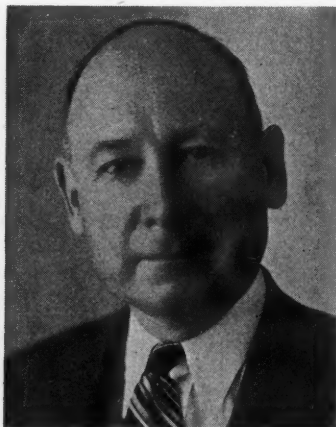


Pages with the Editors

THE other day we saw a series of pictures dealing with the extensive damage done to the city of London during the tragic air raids of 1940 and 1941. One of these pictures showed a crew of a gas company working on temporary repairs to a gas main which had been severed by a bomb explosion. The crew was operating at the bottom and around the sides of a crater, the diameter of which extended almost the entire width of the street.

WHAT especially interested us in this picture was the careful and coöperative way in which the gas crew had incidentally taken care of other utility facilities which had also been damaged. Several men were busy pumping out water and patching a sewer drain. Others had carefully hung, in a series of temporary slings, telephone and electric cables which had been uncovered but not severed by the explosion. Doubtless, telephone, electric, and waterworks repair crews were performing similar coöperative functions for the gas company's facilities at other bombed locations.

It seems to be a question of which utility crew gets to the scene of an "incident" first which determines who makes the "first aid"

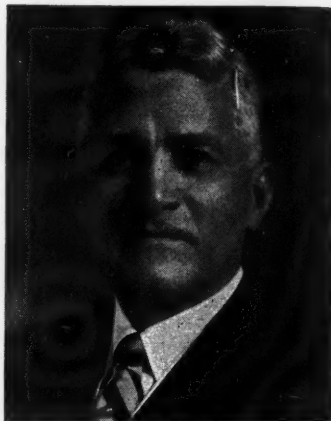


DAVIS M. DEBARD

The spirit of British public service has become finer in the crucible of war bombardment.

(SEE PAGE 531)

APR. 23, 1942



EDWY L. TAYLOR

Even the law cannot rid regulation of the need for truly fair valuation.

(SEE PAGE 554)

repairs for all the utility services. Such is the spirit of intelligent coöperation between the different utility groups in London and other parts of England which has been created and fostered under pressure of a tragic emergency.

THIS is only one of the lessons which American utilities can learn from British experience under actual conditions of aerial siege. In all probability and by the mercy of Providence, American cities will be spared the full horror of the British experience. But there are still certain fields of coöperative action which can well be explored by American utilities under emergency conditions peculiar to the United States. And certainly there are other lessons which American utilities can learn from their British prototypes.

IN this respect, a reading of the leading article in this issue by DAVIS M. DEBARD should prove especially helpful. MR. DEBARD is now vice president of Stone & Webster Service Corporation and has distinguished himself by volunteering to act as a sort of liaison information officer between the British and American utility industries. In other

CRESCENT

**Manufactures ELECTRICAL
WIRES & CABLES to Provide
Power for Victory**



**CRESCENT is in
"all-out" pro-
duction NOW
to help win this war!**

CRESCENT INSULATED WIRE & CABLE CO.



CRESCENT

WIRE and CABLE

Factory: TRENTON, N. J. — Stocks in Principal Cities

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

words, MR. DEBARD made good use of the contacts which he had established during business trips to Europe over the last seven years by developing an intensive correspondence with British utility officials and generously placing the information received therefrom at the disposal of his colleagues in the United States. MR. DEBARD is a graduate of Cornell (M. E., '09) and a past chairman of the general sales committees of both the EEI and AGA.

WE couldn't help remembering the legend of King Midas when we read the article on silver which appears in this issue (beginning page 549). King Midas, as we all know, was cursed by his ability to produce an unlimited amount of that precious metal known as gold. He found it wasn't so precious when it came dinner time. He probably would have settled for any amount of the stuff in consideration of a ham sandwich. Uncle Sam finds himself almost in the position of King Midas these days, thanks to his silver statutes. These silver purchase laws keep bringing in an unwanted and apparently unlimited amount of silver. But up to now it has been perfectly useless except to occupy expensive storage places and facilities for guarding it.

So we have arrived at a point where silver, a so-called precious metal, is actually less precious than homely copper mineral, which forms the basis of our humblest coin—the penny. Hence the serious suggestion that this lazy reserve should be taken out of its hoarding place and put to work wherever possible, substituting for its poorer but more useful relation, copper.



HERBERT COREY

Don't look now; but there's quite a change coming over the old home town.

(SEE PAGE 541)

APR, 23, 1942



HERBERT M. BRATTER

Mars, the alchemist, is changing copper into silver, or vice-versa.

(SEE PAGE 549)

MR. BRATTER, author of this article on silver, is an industrial economist now serving as a Washington adviser and contributor to *Banking* magazine. He is the author of numerous articles on financial and economic subjects.

EDWY L. TAYLOR, whose short article on the necessity for fair value as a rate base begins on page 554, is now a consulting engineer in private practice at New Haven, Connecticut. He will be widely remembered, however, as a member of the Connecticut Public Utilities Commission on which he served for twelve years—several as its chairman. MR. TAYLOR received two degrees from Yale in civil engineering and after five years of teaching spent twenty-five years in railroad service before joining the Connecticut board. He also served as a Lieutenant Colonel in the Army Engineers during World War I.

SPECULATORS on what the "new order" will bring to the typical American community after the war will find food for thought in HERBERT COREY's article (beginning page 541). MR. COREY is a Washington author whose contributions frequently appear in this publication.

THE next number of this magazine will be out May 7th.

The Editors

Saving enough
STEEL
*to put 9,226**
Pursuit Planes
into the
blue!

The GUARDSMAN

"STEEL-SAVER" FILES

THE SHARP STAB of war focuses the will and power of America on one word: VICTORY! We'll all make sacrifices, cheerfully, enthusiastically. But, through the ingenuity of Remington Rand researchers and designers, you need not sacrifice the steel files' efficiency.

The GUARDSMAN—"Steel-Saver" File—is constructed of wood—3-ply and 5-ply. It looks like a steel file and for durability, ease of operation, attractiveness, in all essential features, it is the equal of best grade steel files. *And it costs no more!*

The GUARDSMAN—"Steel-Saver" File—has been designed for addition to existing steel file batteries—four drawer heights, letter or legal size. Standard finish is olive green—*baked on!* Walnut or mahogany grainings are applied identically as on steel. The exteriors can't chip or crack. Hardware and drawer-pulls are a new, beautiful metal-like, strong plastic.

GUARDSMAN drawers operate on a new type of ball bearing extension slides. Less effort is required to open or close these drawers than on any other file! Locking devices, to prevent snooping, can be installed.

Filing cabinets are essential to American VICTORY! You can't operate without them! Here then is the ideal solution to conserving steel and increasing the efficiency of our all-out war drive.

Write today for a free, fully illustrated catalog, that describes construction, design, operating advantages and clerical efficiencies of the new GUARDSMAN—"Steel-Saver" File. Remington Rand Inc., Buffalo, New York.



**The overwhelming, overnight popularity of the GUARDSMAN—"Steel-Saver" File—has caused the step-up, many fold, of our original production plans, releasing millions of pounds of steel for defense industries!*

REMINGTON RAND

*"Victory is Our
Only Objective"*

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

In This Issue



In Feature Articles

What can American utilities learn from British war experience, 531.
British war-time population changes, 533.
Types of camouflage, 534.
Air-raid damage to utilities, 535.
Outfitting lady utility workers, 538.
The new order comes to Middletown, 541.
Effect of war on the American pattern of life, 543.
Shortage of supplies, 545.
Planning a new pattern, 547.
Is silver a public utility, 549.
Vast industrial possibilities of silver, 550.
Suggested repeal of silver laws, 551.
Fair value must still support rate base, 554.
"Going concern value," 555.
Wire and wireless communication, 556.

In Financial News

Utility financing dwindles, 560.
Community Power & Light properties to be realigned, 560.
Electric output and earnings (chart), 561.
Arkansas Natural Gas Corporation, 562.
FPC orders 5-year amortization, 563.
Stock and bond prices (chart), 563.
Standard Gas bonds decline sharply on tax fears, 565.

In What Others Think

General Electric's post-war world, 566.
The ODT takes over transit regulation, 567.
The telephone man is called to the colors, 571.
Are assurances from the government for continuation of the profit system in order, 574.

In The March of Events

Electrical devices barred, 576.
Power purchasing plan, 576.
To direct seaway fight, 576.
Refrigerator ban removed, 577.
Raver urges more protection, 577.
FPC reviews electric bills, 577.
Forbids REA copper, 577.
No additional daylight saving, 577.
Interior funds slashed, 578.
News throughout the states, 578.

In The Latest Utility Rulings

State commission lacks jurisdiction to authorize gas line construction, 586.
Wholesale natural gas rates based on original cost, 586.
Coal surcharge permitted and ruling on combined meter readings deferred, 587.
Telephone company not required to deny service used to aid gambling, 588.
Line construction by rural coöperative not subject to commission regulation, 588.
Abandonment of rail line which bars flood-control project, 589.
Profits to affiliated construction company excluded from plant cost, 590.
New Jersey court upholds board findings on rates, 591.
Telephone service extension in borderline area, 591.
Miscellaneous rulings, 592.

PREPRINTS FROM PUBLIC UTILITIES REPORTS

Various regulatory rulings by courts and commissions reported in full text, pages 193-256, from 42 PUR(NS)

*Chickasaw
CHOOSSES*

Vulcan provides clean heat transfer surfaces to the Combustion four-drum, bent-tube, 400,000 lb. per hr., pulverized coal-fired boiler which serves this new 40,000 kilowatt, 900 lb. per sq. in. Southern plant.

VULCAN SOOT BLOWERS

Chickasaw becomes another in the long list of plants depending on VULCAN Soot Blowers to assure highest heat transfer, real steam economy and freedom from frequent servicing.

The advanced design, HyVuloy and Vulite intimate contact bearings, HyVuloy elements and VULCAN'S Model LG-1 are guarantees of efficient, trouble-free operation in ANY plant.

Remember that whatever the characteristics of your boiler and setting, fuel, or load, Vulcan engineers will be glad to solve any soot blower installation and operating problem involved.

VULCAN SOOT BLOWER CORP., DUBOIS, PA.



Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE



ROY M. NORTH
*Deputy Third Assistant Postmaster
General.*

RAYMOND MOLEY
Contributing editor, Newsweek.

EDITORIAL STATEMENT
Industrial News Review.

JAMES S. KNOWLSON
*Chief, Division of Industry Opera-
tions, War Production Board.*

CHANNING POLLOCK
*Well-known lecturer, author,
and publicist.*

CLYDE T. ELLIS
*U. S. Representative from
Arkansas.*

EDITORIAL STATEMENT
Report for The Business Executive.

CHARLES E. WILSON
*President, General Electric
Company.*

EDITORIAL STATEMENT
Railway Age.

EDWARD FLYNN
*Executive vice president, Burling-
ton Railroad.*

"... the government is a big public utility."

"War does not suspend representative government."

"This country's oil industry is one of the most impor-
tant and most certain allies the United Nations have."

"The only justification any of us have for existing
today is that we can make some contribution to the war
effort."

"In less than a decade, our government has restored
almost every evil against which our forefathers fought
in 1776."

"The power possibilities in this [Arkansas] section are
such that we can produce twice as many kilowatt hours
of electricity as TVA."

"Victories are going to those nations organized for the
single purpose of fighting war, rather than for the pur-
pose of effecting social reform."

"I do not believe our people are complacent, and I
know for a fact that they are weary of being told that
they are, usually by those who helped to contribute to our
present situation."

"Not all railroad men and shippers appear yet to realize
fully how fortunate the transportation community is in
the type of war-time control which has been established
for it under Director of Defense Transportation Joseph
B. Eastman."

"The entire facilities of the railroads have been placed
at the disposal of the government to be used in any man-
ner it sees fit. So far the large volume of military traffic
has not interfered to any great extent with normal rail-
road traffic."

PROLONG THE LIFE OF YOUR BURROUGHS MACHINES WITH BURROUGHS MECHANICAL SERVICE

Today it is vitally important that all users of figuring and accounting equipment make their machines last as long as possible.

The accessibility of experienced Burroughs service men . . . the quality of their work . . . their eagerness to do a good job . . . all are major factors in helping Burroughs users to keep their machines in uninterrupted operation—get more and better work out of them—and greatly prolong their life.

For complete information, telephone your local Burroughs office, or write direct to—

**BURROUGHS ADDING MACHINE COMPANY
DETROIT, MICHIGAN**

In addition to mechanical service, Burroughs also offers the advice and counsel of its Systems and Installation staff, which is often able to suggest operating short-cuts that save time, as well as to show how related records and vital statistics may be obtained as a by-product.

REMARKABLE REMARKS—(Continued)

HAROLD STRAUSS
Associate editor, publishing firm
of Alfred A. Knopf.

"It may . . . be merely an American mannerism to talk of the 'inevitability' of post-war collapse, and then to set about avoiding it with ingenuity, determination, and a good chance of success. But it is about time that ingenuity and determination be summoned; success will take care of itself."

BURTON K. WHEELER
U. S. Senator from Montana.

"There is not any danger of the government taking them [the telephone lines] over and keeping them unless the complexion of the Congress of the United States completely changes, any more than there was danger of the government taking over the railroads and keeping them after the war was over."

JOHN E. RANKIN
U. S. Representative from
Mississippi.

"At least 90 per cent of all the criticism hurled at Chairman Fly and the FCC has come straight from the powerful radio monopoly. That criticism has come because under Mr. Fly, for the first time in history, the commission has regulated the industry instead of the industry regulating the commission."

D. LANE POWERS
U. S. Representative from
New Jersey.

"Ninety million dollars will buy a great quantity of tanks. Ninety million dollars will buy a lot of equipment that is more sorely needed now than these two projects [Bull Shoals and Table Rock] which started as flood-control projects and are now sought to be sold to us under the guise of power and national defense."

EDITORIAL STATEMENT
Engineering News-Record.

"Back in the early days of the defense effort, getting a high priority and using it developed into a great competitive sport; responsibility for saving critical materials was up to the other fellow, who couldn't get a priority. Things are different today, and every unnecessary use of a critical material must be regarded as waste."

RALPH K. DAVIES
Deputy Petroleum Coordinator for
National Defense.

"The petroleum industry today, in so far as transportation is concerned, is in a sense the victim of its own past efficiency. Because it operated an efficient, low-cost transportation system, there was little or no slack to absorb the shocks of war. Efficiency demanded that it be operated at all times as nearly at maximum capacity as possible to keep the costs low."

ALBERT S. JOHNSON
President, Southern Union Gas
System.

"If we of the gas industry, during this period, should lower our standards of efficient operation and service, our industry may receive a blow that could well be the beginning of the end of private ownership of utilities. If our standards go down, if our service is allowed to become slipshod, we will simply be classed as a group that failed to measure up to the test when the emergency came."

Safeguard

Equipment

Outlay

with
R&IE
METAL ENCLOSED BUS

R&IE bus provides individual housings for each conductor with air space between—thus preventing interphase shorts and limiting any trouble to ground faults. The air space also promotes cooling.

R&IE bus provides ample strength to resist short circuit stresses. These stresses are taken by the mounting frames in which the insulators are subjected to compression loading only.

R&IE bus covers are housings only and

not strength members. These housings can be gasketed to keep out dirt and moisture.

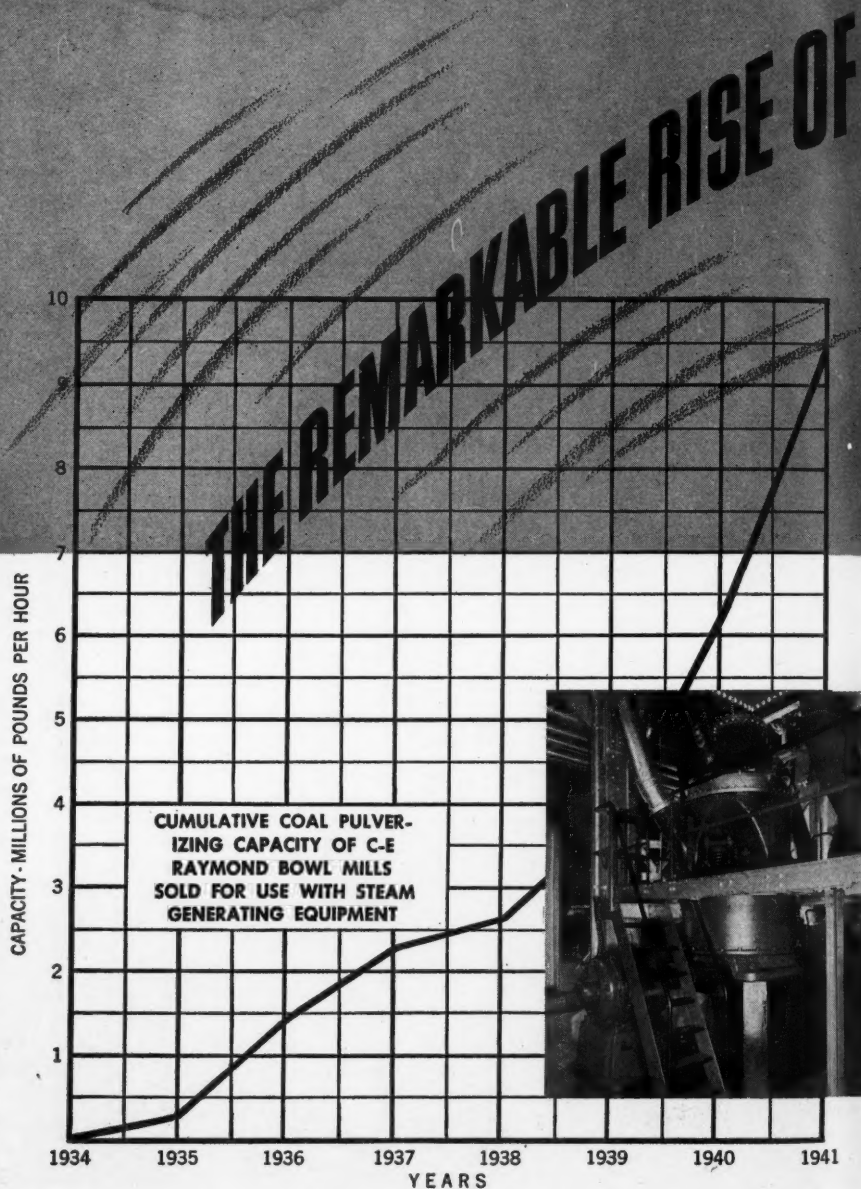
R&IE bus can be mounted on floor, wall, or ceiling and is readily fitted to a structural steel mounting.

R&IE bus can be installed, aligned, adjusted and tested, and then the housings put on. Conversely the housings can be taken off for inspection by removing a minimum number of bolts.

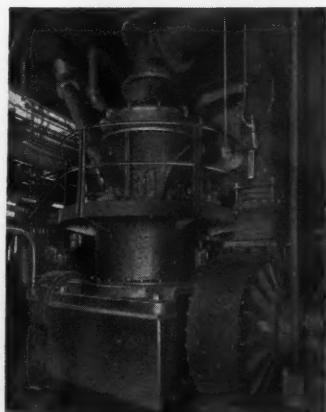
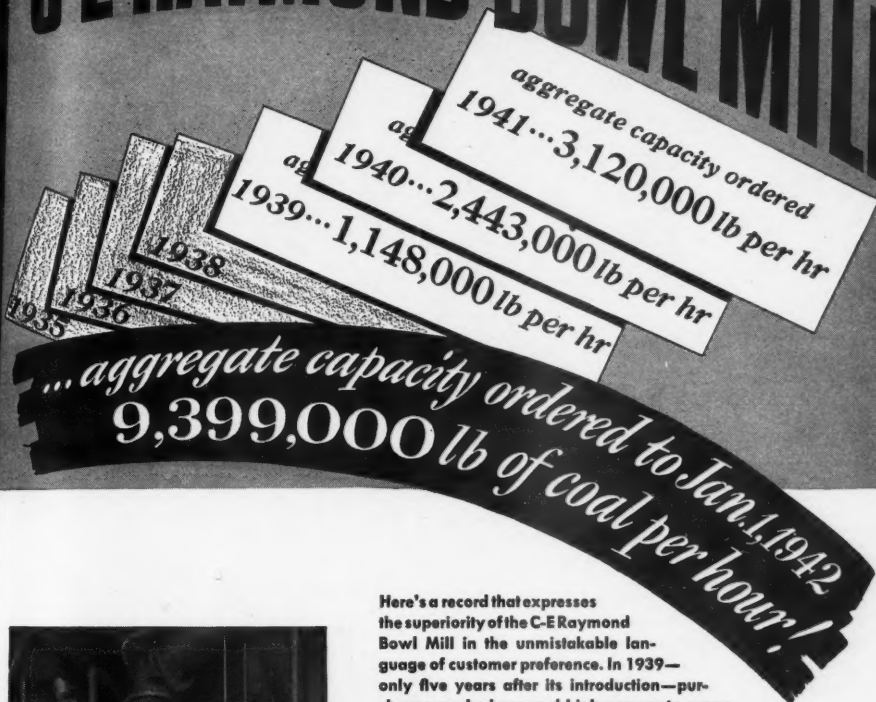
R&IE bus can compete in price and in low cost of erection with any other type of bus structure and also give the above distinct advantages.

RAILWAY AND INDUSTRIAL ENGINEERING CO.
GREENSBURG, PA. . . In Canada, Eastern Power Devices, Ltd., Toronto





OF C-E RAYMOND BOWL MILL



Above and at the left are recent installations of the C-E Raymond Bowl Mill in two public utility plants.

Here's a record that expresses the superiority of the C-E Raymond Bowl Mill in the unmistakable language of customer preference. In 1939—only five years after its introduction—purchases reached a record-high aggregate capacity in excess of 1,000,000 lb of coal per hr. But that figure was more than doubled during 1940 and then almost tripled by the aggregate capacity purchased in 1941.

Besides indicating growing recognition by new customers of the C-E Raymond Bowl Mill's design, construction and operating features, the recent record also tells of the satisfaction of previous purchasers. For over 60% of all contracts placed in both 1940 and 1941 were repeat orders. In other words, virtually 2 out of every 3 contracts were received from customers whose past experience enabled them to determine the contributions made by C-E Raymond Bowl Mills to the efficiency, economy and reliability of their steam generating units.

A-553

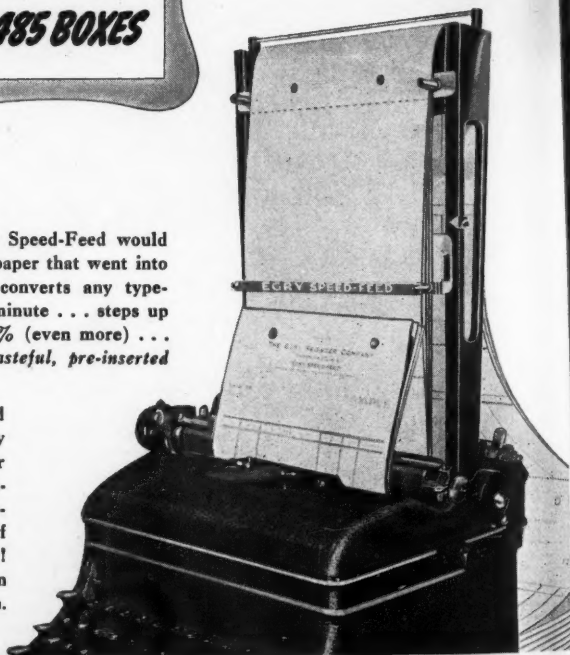
200 MADISON AVENUE, NEW YORK, N. Y.

COMBUSTION ENGINEERING

WHAT!**2500 BOXES OF
CARBON PAPER
THROWN AWAY?****VESSIR - IN ONE YEAR,
BUT WE COULD HAVE
SAVED 2485 BOXES**

You're right, young lady! The Egray Speed-Feed would have saved the 2485 boxes of carbon paper that went into the waste basket. The Speed-Feed converts any type-writer into a billing machine in one minute . . . steps up the output of typed forms per day 50% (even more) . . . and eliminates the use of costly, wasteful, pre-inserted one-time carbon forms!

Yes, a user of the Egray Speed-Feed and 50,000 five-part 8½" x 11" Egray Continuous Printed Forms per year saves 2485 boxes of carbon paper annually. In dollars and cents that saving will more than pay for the use of the Speed-Feed for a century or more! Literature on request. Demonstration in your own office without obligation. Address Dept. F-423.

**EGRY SPEED-FEED**

The EGRY REGISTER Company
Dayton, Ohio

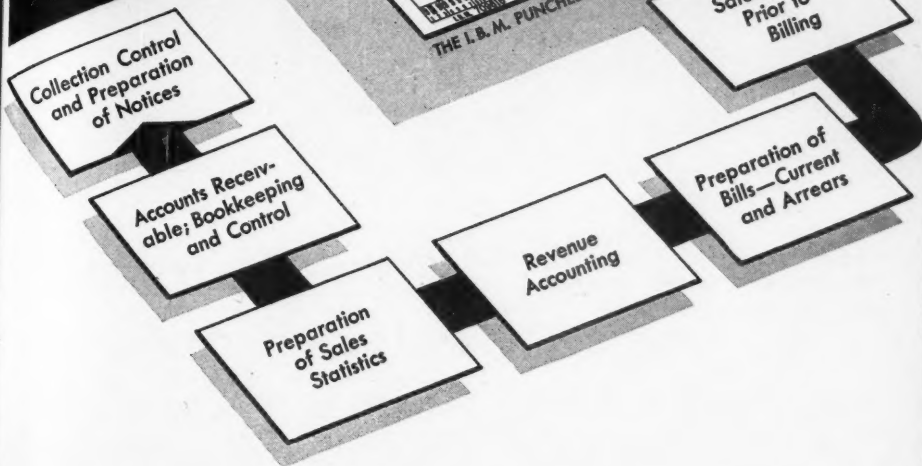
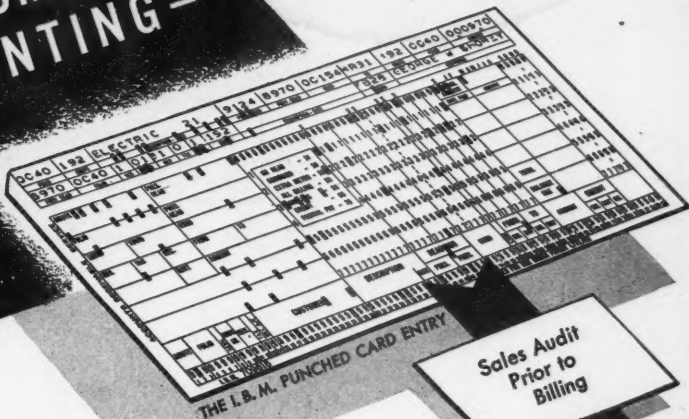
SALES AGENCIES IN ALL PRINCIPAL CITIES

The Egray Register Co. (Canada) Ltd., King and Dufferin Streets, Toronto, Ontario, Canada

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

IN CUSTOMER ACCOUNTING—

THE MODERN METHOD OF FOLLOW-THRU IS THE FAST, ACCURATE IBM WAY...

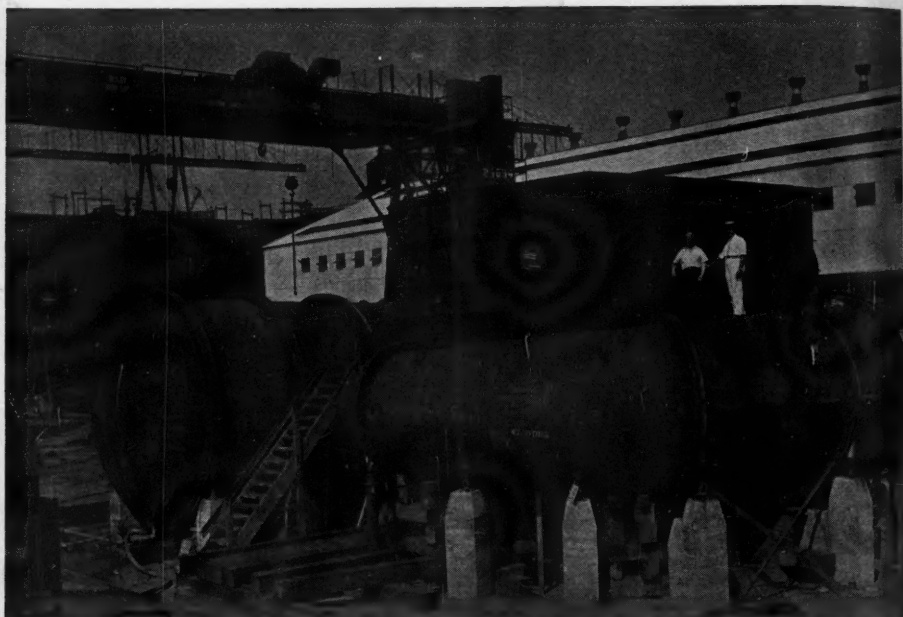


In customer accounting the I.B.M. punched card is a *correct* and *unalterable* entry recording a metered sale to the utility customer. This proved unit entry may be used again and again in high-speed automatic Electric Accounting Machines in every operation of customer accounting... Thus, higher standards of accuracy together with the speed of mechanized methods can be brought to all phases of customer accounting.

INTERNATIONAL BUSINESS MACHINES CORPORATION

Offices in  Principal Cities

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



150,000 HP Francis Turbine for Grand Coulee Project

(SHOP HYDROSTATIC TEST—230 LB. PER SQ. IN.)

HYDRAULIC TURBINES
FRANCIS AND HIGH SPEED
RUNNERS
BUTTERFLY VALVES
POWER OPERATED RACK RAKES
GATES AND GATE HOISTS
ELECTRICALLY WELDED RACKS

Newport News Shipbuilding and Dry Dock Company
(Hydraulic Turbine Division)
Newport News, Virginia

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Facts You Can Use to Cut Distribution Costs



NO CONCRETE CASING is needed when you install J-M Transite Conduit. It does not warp... holds its strength and true form under heavy earth loads and traffic stress.

TRANSITE DUCTS ARE STRONG!

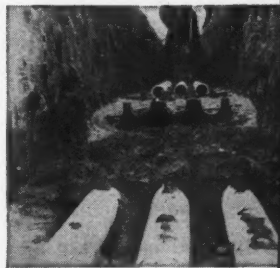
YOU save all the expense of "concreting-in" when you use Johns-Manville Transite Conduit. So strong it needs no protective casing of any kind, this durable duct holds its true form under sustained earth loads and traffic pressure. Warping is practically eliminated.

And you spend less money on maintenance, for Transite is an asbestos-cement product... completely non-metallic and inorganic. It can't burn, rot or cause dangerous fumes or gases. It offers exceptional resistance to weather and corrosion. Yet installed costs are low, for Transite's long lengths, light weight and smooth bore make work fast and economical.

For complete details, write for brochure DS-410. Johns-Manville, 22 East 40th Street, New York, N. Y.



MADE OF ASBESTOS AND CEMENT, Transite Conduit cannot rust or rot... offers exceptional resistance to all forms of corrosion.



TRANSITE DUCTS are light in weight, easy to assemble. Their smooth bore stays smooth in service... permits easy, rapid cable pulls at any time.

**FOR
EFFICIENT,
LOW-COST
SERVICE,
SPECIFY...**



Johns-Manville TRANSITE DUCTS

TRANSITE CONDUIT... For use underground without a concrete envelope and for exposed locations.

TRANSITE KORDUCT... For installation in concrete. Thinner walled, lower priced, but otherwise identical with Transite Conduit.



THE EFFECT OF CORRECT AND INCORRECT HEAT ON MEAT AND POULTRY ROASTING

ROASTS WERE EXACTLY ALIKE IN WEIGHT AND MEASUREMENT BEFORE ROASTING

Left roast roasted at low heat for a long time, resulting in greater shrinkage and loss of vitamins.

Right roast roasted at medium temperature, retaining vitamins and allowing shrinkage and weight loss to occur, and meat has better taste than roast cooked at high temperature.

Roast at right heat controls shrinkage and weight loss, retains vitamins, and has better taste than roast cooked at high temperature.

Roast at right heat controls shrinkage and weight loss, retains vitamins, and has better taste than roast cooked at high temperature.

Measured Heat AN IMPORTANT INGREDIENT IN EVERY RECIPE

The Robertshaw book "Measured Heat" has become a competent cooking manual in thousands of schools and colleges.

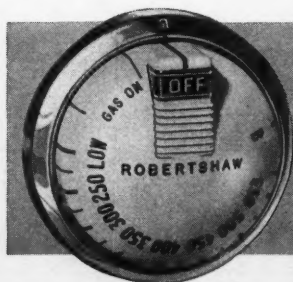
*One year ago we
told her about
"Measured Heat"*

Robertshaw bases its "measured heat" program on this fundamental: You can teach the public to *want* vitamins, but you can't actually get it to *take* vitamins—unless you teach proper cooking. Poor cooking breaks down vitamins, as well as appetite. It was a year ago that Robertshaw began teaching this.

And so, today when America looks

to her kitchens, hundreds of thousands of students and homemakers are already learning better cooking methods — helped by Robertshaw-equipped ranges and the "measured heat" program.

Robertshaw proudly makes this contribution to the nation's health, its conservation of food and fuel, and the winning of the war.



ROBERTSHAW
HEAT CONTROLS

ROBERTSHAW THERMOSTAT COMPANY, YOUNGWOOD, PA.

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

At your Service!



• Whatever the demands of the gas industry may be, Connolly is equipped to meet them. With our new laboratory for scientific testing of purification materials and greatly increased facilities for the production of Iron Sponge, Governors, Regulators, Back Pressure Valves and other equipment for gas purification and control, Connolly is at your service, ready for any emergency.

Under the able management of Mr. A. L. Smyly, pioneer in gas purification and pressure regulation, this organization has continued its leadership in the field, and the fact that Connolly products are standard in hundreds of the leading gas plants of the country is indicative of the service rendered.

• Mr. A. L. Smyly
President
Connolly Iron
Sponge &
Governor Co.

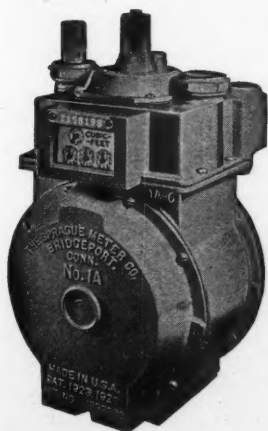
Connolly

IRON SPONGE and GOVERNOR Company
CHICAGO, ILL.

ELIZABETH, N. J.



SPRAGUE COMBINATION METER-REGULATOR



LATEST ACHIEVEMENT
IN
GAS MEASUREMENT AND
CONTROL.

**For Manufactured,
Natural and Butane Service**

Write for bulletin.

**THE SPRAGUE METER CO.
Bridgeport, Conn.**



THERE ARE NO PRIORITIES ON PROGRESSIVE THINKING!

IN times of emergency, such as these, there is little incentive or opportunity for the average manufacturer to develop new lines or to build improvements into existing products. A generally oversold condition, coupled with unprecedented wartime demands, is not conducive to immediate progress within the equipment industry. It does provide, though, an opportunity for some good solid thinking on what can be done when the emergency is over.

The Engineering, Research and Development Departments of the Pittsburgh-National organization are thinking ahead of the times. On the drawing boards new designs are taking form. In the laboratories, experimental models are being put through their paces. Scarcity of materials and priority controls will prevent the immediate introduction of these developments. *But there are no priorities on progressive thinking.* With the ultimate return to normal, the results of today's research will be apparent in tomorrow's equipment.

The Pittsburgh-National organization, with its unexcelled facilities for research and development, including fellowships at a world renowned scientific institute, have contributed valuable aids to the Nation's defense efforts.

In peace or at war, continuous research goes forward to assure that the technical developments of the future, be they designs, materials or methods, will be incorporated in the products of the Pittsburgh-National line.

PITTSBURGH EQUITABLE METER COMPANY

NEW YORK	OAKLAND	MERCO	NORDSTROM VALVE COMPANY	KANSAS CITY	SEATTLE
BROOKLYN	TULSA			PHILADELPHIA	HOUSTON
DES MOINES	CHICAGO	Main Offices, Pittsburgh, Pa.		SAN FRANCISCO	COLUMBIA
MEMPHIS	BOSTON	NATIONAL METER DIVISION, Brooklyn, N. Y.		LOS ANGELES	BUFFALO

Pittsburgh-National Meters

THE MOST COMPLETE LINE OF WATER METERS IN THE WORLD



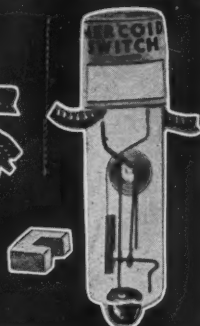
TYPE 125 LIQUID LEVEL CONTROL. Suitable for use on Transformers.



TYPE PQ DIAPHRAGM CONTROL. For regulation of liquid levels from changes in head pressure.



TYPE DA-35 TEMPERATURE CONTROL. Used with blower fan applications for transformers.



MERCOID

SWITCH PROTECTION A WAR TIME NECESSITY

Automatic controls play a vital part in domestic and industrial engineering. They assume special importance during war time emergencies.

Time, and the efficiency of both man and mechanical power must be conserved.

The mission of a Mercoide Mercury Switch in an automatic control is to assure longer life and greater dependability—minimizing the need for attention after the control is in service. Mercoide Controls lend themselves to quick installation and adjustment, all of which are invaluable contributions in a time of national crisis.

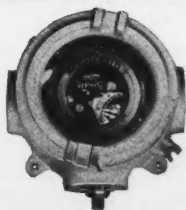
Mercoide Switches, the distinguishing feature, used exclusively in all Mercoide Controls, are especially designed types of hermetically sealed mercury switches. They are not affected by dust, dirt, moisture or corrosive gases, nor are they subject to open arcing, oxidation, pitting or sticking of contacts—common causes of trouble.

Keep these important facts in mind when selecting automatic controls. The line is complete and our cooperation is at your service.

THE MERCOIDE CORPORATION • 4213 BELMONT AVE. • CHICAGO, ILL.



No. 855 EHT EXPLOSION-PROOF THERMOSTAT. Line voltage type.



TYPE 970 EXPLOSION-PROOF CASE for Temperature and Pressure Controls



TYPE 76 EH EXPLOSION-PROOF INDUSTRIAL LIQUID LEVEL CONTROL.

**When jobs are tough—
and time is short—**

**"Cleveland's"
Come
Through!**



**"Cleveland's" National Defense
Cooperation Is 2-Fold**

1st—By supplying its equipment for a majority of recent Defense Pipelines and for various branches of the United States Military and Naval Services.

2nd—By its distinctive design which permits important weight savings, releasing vitally needed steel for armament, tanks, ships, etc. IT IS ESTIMATED THAT OVER 1000 TONS OF STEEL WERE THUS SAVED IN 1941—

On a weight comparison basis against the older, heavier, and bulkier type of machine which "Cleveland's" displace.

POWER, ruggedness and speed are concentrated in "Cleveland's" in a smaller, more mobile, more easily-handled "package," because of sound, modern design coupled with thorough usage of the toughest, longest wearing materials in the market.

This explains why "Cleveland's" continue to be the preferred equipment on so many projects, current and recent, where rough, mountainous terrain and severe soil conditions are encountered.



THE CLEVELAND TRENCHER COMPANY

20100 ST. CLAIR AVE.

"Pioneer of the Small Trencher"

CLEVELAND, OHIO



"CLEVELANDS" Save More ... Because they Do More

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)



LIKE A LIGHTHOUSE *in a vast sea of grain*

THERE it stands, alone, unfailing, far out in a sea of waving grain, or perhaps in some remote mountain pass or lonely prairie . . . like a lighthouse on the land.

For it is signals like this—safeguarded in thousands of locations by Exide Batteries—that enable the railroads of the nation to speed their trains across the country, loaded with the men and material so essential to our national defense.

In public utility and private industrial plants everywhere, Exide Batteries are rendering the same faithful service that characterizes their use by the railroads, wherever economical, dependable battery power is required.



THE ELECTRIC STORAGE BATTERY CO.

The World's Largest Manufacturers of Storage Batteries for Every Purpose

PHILADELPHIA

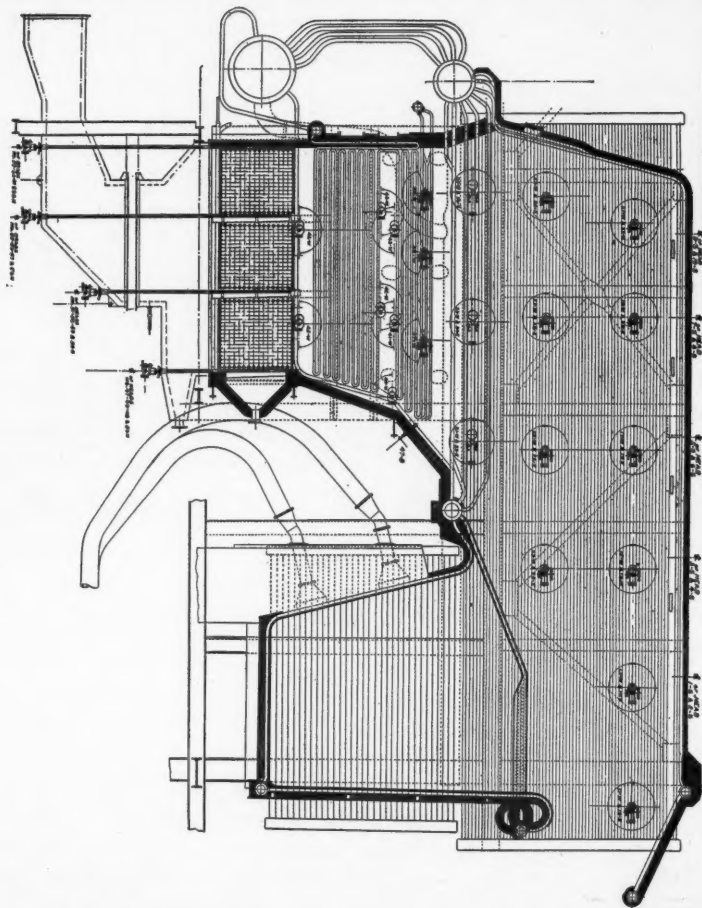
Exide Batteries of Canada, Limited, Toronto

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

BAYER SOOT CLEANERS

APPLIED TO

MODERN PUBLIC UTILITY BOILER

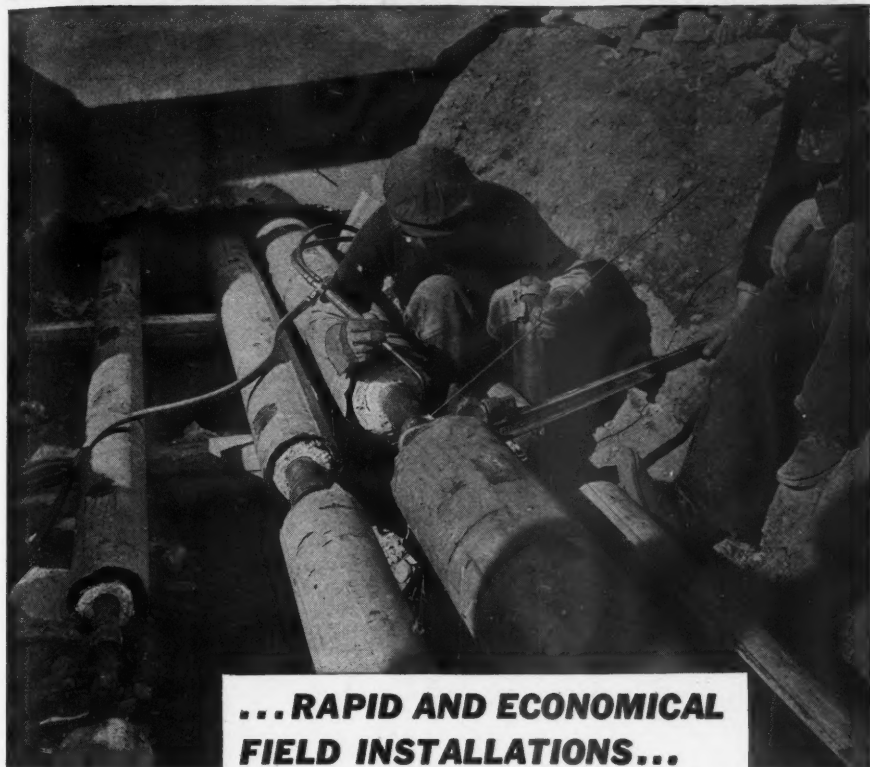


605,000 LBS./HR BOILER
1350 LBS. PRESSURE

PULV. COAL FIRED
950°F. STEAM TEMPERATURE

THE BAYER COMPANY
ST. LOUIS, MISSOURI

FOR UNDERGROUND PIPE LINES



**...RAPID AND ECONOMICAL
FIELD INSTALLATIONS...**

with EHRET'S DURANT INSULATED PIPE

Laying underground insulated pipe lines is both rapid and economical when you use the Durant Insulated Piping system. This pre-insulated and pre-sealed system comes to you in completely finished units, ready for installation. No tile or concrete tunnels are required and there is nothing extra to buy. The pipe supports are self-contained and the piping units can be laid with a minimum of trenching and field work. The asphalt protection is permanently water-proof and the 85% Magnesia insulation will maintain its efficiency throughout the years.



{ Write us today for your copy of the new Ehret 176-page Insulation Handbook, #K200, which describes the D. I. P. system as well as many other Ehret products. It's free.

EHRET

MAGNESIA MANUFACTURING CO.



VALLEY FORGE, PENNA.

...THERE IS AN EHRET DISTRIBUTOR OR CONTRACTOR IN EVERY INDUSTRIAL AREA

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

POWER PIPING

Meet New "Fighting" Standards!

Like fighting planes and tanks and guns, plant equipment for defense production must be built to higher standards than ever before. In power piping, higher operating temperatures and pressures create problems in fabrication engineering that can be efficiently solved only by specialists.

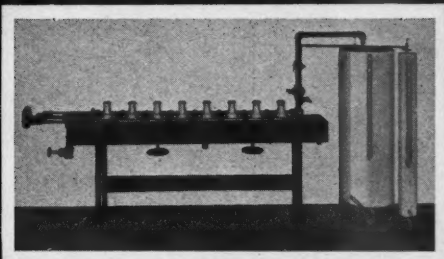
Grinnell engineers are power specialists equipped by long experience to interpret new high-pressure, high-temperature requirements into speedily-erected, underwriter-approved piping systems. Backed by complete fabrication facilities at strategic locations, Grinnell Piping Prefabrication is helping industry to meet new "fighting" standards of power production.

If power extensions are one of your problems, "Give the Plans to Grinnell". Write for Data Book "Grinnell Piping Prefabrication". Grinnell Company, Inc., Executive Offices, Providence, Rhode Island. Branch offices in principal cities.

PREFABRICATED PIPING BY **GRINNELL**
WHENEVER PIPING IS INVOLVED

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

To secure BETTER TESTING METERS



You need BETTER METER TESTING

In 1932 the City of Hartford initiated a program in which meters were taken out to be tested and repaired, to meet the requirements of the NEWWA, every 5 years. As a result, they found that the number of meters removed for all causes other than routine tests has now been materially reduced. This improvement is credited largely to the elimination of weak links before they can break down.

Today you cannot afford to ignore the importance of better meter testing to develop better testing meters and to lengthen the accurate service-life of the meters between tests. Meters should be tested at established rates of flow in gallons per minute or cubic feet per hour. This eliminates possible inaccuracies inherent in the use of a given diameter orifice. Your Trident representative has had the opportunity of observing and assisting in the operation of many meter shops, and will be glad to be of assistance in connection with your meter problems. Do not hesitate to call him.

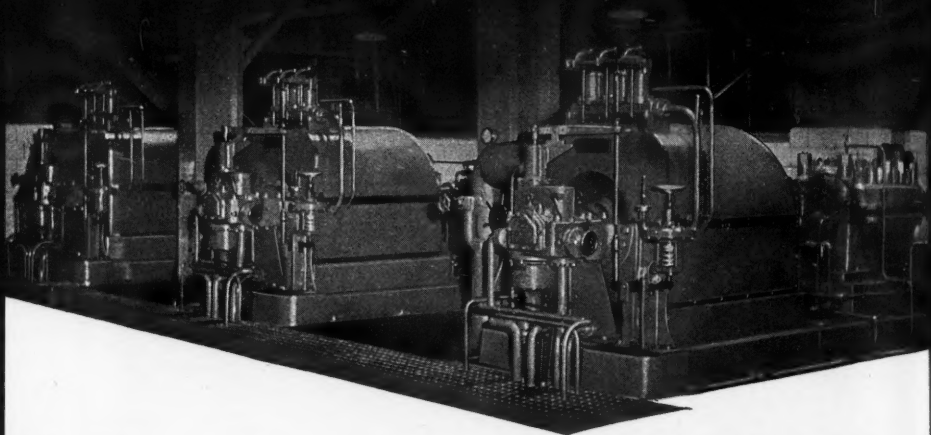


NEPTUNE METER COMPANY • 50 West 50th Street • NEW YORK CITY

Branch Offices in CHICAGO, SAN FRANCISCO, LOS ANGELES, PORTLAND, ORE., DENVER, DALLAS, KANSAS CITY, LOUISVILLE, ATLANTA, BOSTON.

Neptune Meters, Ltd., Long Branch, Ontario, Canada.

ELLIOTT



Boiler-Feed Pump TURBINES

To serve two high-pressure boilers installed with a topping turbine, the Metropolitan Edison Company at Reading, Pa., installed three boiler-feed pumps driven by Elliott steam turbines. These turbines are of the multi-stage, high efficiency type, take steam at 250 lb. pressure and exhaust at 3 lb. to two Elliott 400,000-lb.-per-hr. deaerating feedwater heaters which serve the high-pressure boilers. The use of these variable-speed turbine drives permits a steam saving and assures closer feedwater control.

Modern auxiliary turbine drives, running up to several thousand horsepower, cover a size range in which Elliott Company has specialized for many years. In this field, our engineers have accumulated valuable experience and have developed special competence. They know how to fit the turbine to your needs and conditions and how to attain both high efficiency and maximum dependability. Ruggedness is characteristic of Elliott turbines, both multi-stage and single-stage.



ELLIOTT COMPANY

STEAM TURBINE DEPT., JEANNETTE, PA.

District Offices in Principal Cities

1-659

TURBINE-GENERATORS • MECHANICAL DRIVE TURBINES • ENGINES • ENGINE-GENERATORS
MOTOR-GENERATORS • MOTORS • GENERATORS • CONDENSERS • STEAM JET EJECTORS
AERATORS • FEED-WATER HEATERS • DEAERATING HEATERS • CENTRIFUGAL BLOWERS
URBOCHARGERS • DESUPERHEATERS • STRAINERS • SEPARATORS
RELEASE EXTRACTORS • NON-RETURN VALVES • LAGONA-LIBERTY TUBE CLEANERS



Utilities Almanack



APRIL



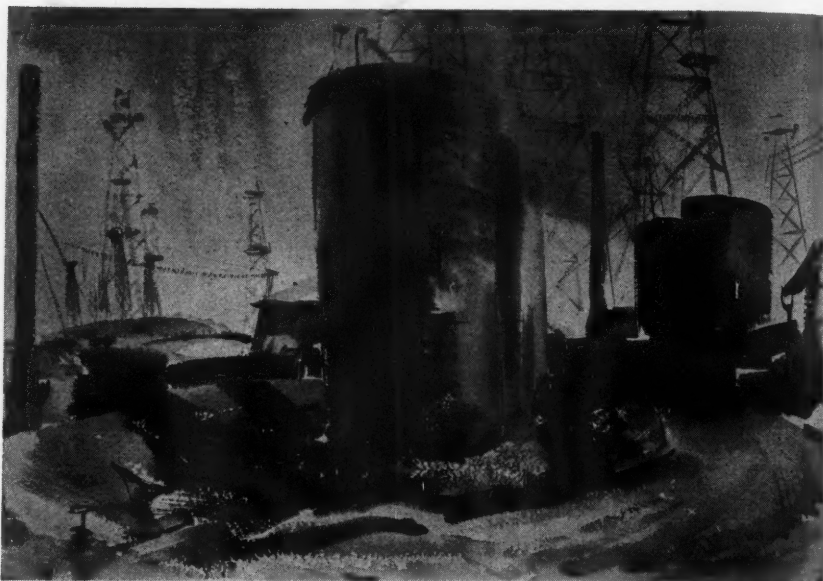
23	T ^h	† Northwest Electric Light and Power Association, Engineering and Operating Section, opens meeting, Seattle, Wash., 1942. ☾
24	F	† Maryland Utilities Association holds spring meeting, Baltimore, Md., 1942.
25	S ^a	† American Water Works Association, Pacific Northwest Section, will hold session, Walla Walla, Wash., May 7-9, 1942.
26	S	† National Electrical Manufacturers Association will hold meeting, Hot Springs, Va., 1942.
27	M	† Association of Iron and Steel Engineers opens conference, Hamilton, Ont., 1942. † Chamber of Commerce of the United States convenes, Chicago, Ill., 1942.
28	T ^u	† United States Independent Telephone Association starts spring conference, Chicago, Ill., 1942.
29	W	† American Institute of Electrical Engineers, Northeastern District, opens convention, Schenectady, N. Y., 1942.
30	T ^h	† American Water Works Association, New York Section, starts meeting, Niagara Falls, N. Y., 1942. ☺



MAY



1	F	† Accounting Meeting of Gas and Electric Utilities will be held, Cleveland, Ohio, May 11, 12, 1942.
2	S ^a	† Illinois Telephone Association will convene, Peoria, Ill., May 12, 13, 1942.
3	S	† American Society of Planning Officials will hold meeting, Indianapolis, Ind., May 24-28, 1942.
4	M	† AGA Natural Gas Convention begins, New Orleans, La., 1942.
5	T ^u	† AGA Distribution Conference starts session, New Orleans, La., 1942. † Midwest Safety Conference and exhibits begin, Chicago, Ill., 1942.
6	W	† Electrical Manufacturers Club opens meeting, Hot Springs, Va., 1942. † Indiana Telephone Association starts convention, Indianapolis, Ind., 1942.



Courtesy of Ferargil Galleries

From Elsie Hafner, N. Y.

Oil Fields

By Barse Miller

Vol

A
the
enc
tion
tra
pai
cre
cos
ess
tai
bo
do

Public Utilities

FORTNIGHTLY

VOL. XXIX; No. 9



APRIL 23, 1942

WHAT CAN AMERICAN UTILITIES LEARN FROM British War Experience?

Closest coöperation of management and personnel, plus a high sense of individual responsibility assumed by everyone connected with the utility organization, appears to be the basis for the heroic performance of British public services under pressure of the most disheartening adverse conditions. "It all depends on me" is the slogan which everybody in the British utility business seems to have adopted for the duration.

By DAVIS M. DEBARD

AMERICAN utilities planning for operation under war conditions can learn much by familiarizing themselves with British utility experience during the last few years; protection of plant and distribution system; training of employees; emergency repair organizations; fire spotters and increasing of rates to meet increased costs. At present it does not seem necessary to make such complete and detailed plans for protection against bombing as England was required to do. But its experience, its mistakes,

and its successes under the stress of war should be known to our operating utilities. With a knowledge of the operation of utilities under such conditions in England, more intelligent plans could be made by United States operating companies. The advisability of adopting those measures adjusted to our conditions, deemed wise for protection in their particular locality, could be more accurately estimated.

I am of the opinion that the American utilities could make no mistake in beginning the training of their em-

PUBLIC UTILITIES FORTNIGHTLY

ployees to maintain service under war conditions, which would include bombings, should they occur. When the English utilities found that war was inevitable, what did they do for their protection?

FIRST, they set about to train their employees, from office boy to president, in just what part they must play when their plant and distribution system suffered from fire and bombing. I observed some of these training classes at the British Gas Light and Coke Company, Field Laboratory, the Watson House, London, where several hundred employees were placed at windows on second, third, and fourth floors of adjacent buildings while actual bombing in an open field was carried out on gas mains which, after the explosions, set fires in a number of dummy houses. Valves were turned to shut off gas and different methods of fire fighting were demonstrated and repairs were started. This was to give the employees a first-hand picture of actual bombing conditions. This training was, of course, carried on for many months and some 16,000 employees in this one large company knew exactly the part they were to play under bombing conditions.

Similar training was carried on by other industries and utilities. When war came so thorough had the rehearsals been that service has been maintained to a high degree, few being compelled to wait for current more than a 24-hour period. Some day a story of heroism and devotion to duty will be written about the employees of the English utilities. Many have been killed in line of duty and a great many more have been injured. When their

families moved from London they remained to carry on.

WHEN their homes were bombed during the night, the majority reported on time for duty the next morning.

The English people, as a whole, have gone forward with indomitable spirit, but we should all be especially proud of the devotion to duty of our fellow workers across the sea who have maintained *service* under the most trying conditions. The utility industry is classed as an essential business and deferment from draft has been granted many of its essential men over twenty-five years of age. Women, however, are taking their place in heavy, as well as light, work in the utilities, such as gas house operators, handling of coal, meter readers, collectors, repairs, etc.

More than 60 per cent of all gas and electric meters in England are prepayment; the balance are read on a quarterly basis. Thus, each utility must maintain its own collectors and readers. Appliances are, in the majority of cases, owned by the utility and rented on quarterly payment basis to customers. This plan has increased the central station load but has retarded appliance development.

Not many electric ranges in England have heat control; few gas ranges have pilot lights. The fifteen gas companies serving Greater London not competing (but operating in separate districts) have established a Regional Gas Centre for making all repairs wherever bombs fall. This has worked very well and should be studied by water, gas, sewer, electric, and telephone companies.

BRITISH WAR EXPERIENCE



War-time Population Changes

This map shows the percentage increase or decrease in the total population of each county in England and Wales. It was prepared by Lord & Thomas, Ltd., to enable retailers to see how their own particular localities have been affected.

PUBLIC UTILITIES FORTNIGHTLY

SECOND, various types of camouflage were used in England to make plants more difficult to spot from the air. This was worked out in conjunction with the British Air Force which made observations at various levels. A new smoke and fog camouflage has been developed that will blot out a blast furnace, electric or gas plant, from the air pilots' vision within a few minutes time after first flash of air-raid signal. The usual fencing of property, protective walls, additional guards, a pass system for employees, and other methods of protection were resorted to.

In the more vulnerable areas, that is, on our coasts, some thought should be given to gas holder and plant camouflage, the camouflaging of tops of busses, the painting to match landscape of bright colored roofs, the bricking up or sandbagging of certain openings—all these might be well worth considering at this time.

Blackouts are obtained in homes, stores, factories, and power stations by total screening of windows, skylights, doors, and other apertures against the egress of light from within. *Full inside illumination is encouraged.* Darkness inside buildings would be bad for morale.

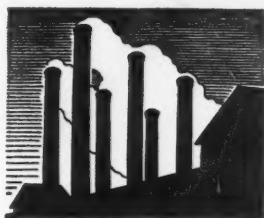
Third, electric distribution systems were sectionalized, with a number of connections to main source, and all isolated generating plants in the area were required to be interconnected to the central station system in order to furnish emergency current, should the main source be interrupted. Practically all central station generating plants, wherever possible, are connected with the grid system. Gas distribution systems were likewise interconnected with other gas companies wherever feasible.

Utility interconnections so widely practiced in America have proved of great value in maintaining service.

IN order that production may not be unduly delayed, in cases of bomb damage, most industries have a supply of essential spare parts for their machines. The British Grid, when the war began, in coöperation with the operating companies, purchased some \$10,000,000 worth of spare parts, such as switching apparatus, transformers, copper wire, regulators, etc., and placed these in bomb-proof shelters in various sections of the country easily accessible. After two years of bombing it is reported that repairs have been made with such speed that comparatively few customers are without service within a 24-hour period. The gas companies made additional main connections and installed many hundreds of additional valves so that small sections could be isolated quickly and easily.

Retaining walls were erected around generators, vulnerable switching apparatus, and auxiliary machinery; station pilot lights were installed. In case of a bomb damaging the roof the power station could continue to operate without any light emitting through the hole.

Asbestos suits were placed where they could quickly be used in turning off valves menaced by fire and in plugging breaks to extinguish fire in gas distribution mains. Sand is kept available in buckets to extinguish fire bombs, and there is the so-called stirrup pump, which, when placed in a bucket of water and hand operated, throws a small swift stream of water. These are very effective in putting out fires in early stages.



Blackouts—British Style

"BLACKOUTS are obtained in homes, stores, factories, and power stations by total screening of windows, skylights, doors, and other apertures against the egress of light from within. FULL INSIDE ILLUMINATION IS ENCOURAGED. Darkness inside buildings would be bad for morale."

ALTHOUGH bombs have pierced many holders, causing loss of gas, they have not caused explosions. Some holders have caught fire, but fires were speedily extinguished. Holders can be quickly repaired—one London holder has 256 patches—and put in operation again. London is served by some 15 gas companies which have pooled their repair gangs and stock of supplies and established a central control office. The same procedure has been resorted to by the 21 electric companies serving London. While bombs and fire have destroyed a large residential and commercial section around it, the large Battersea electric plant on the Thames, of one-half million kilowatt capacity, has not suffered any material damage.

Many companies have strengthened their communication systems by using 2-way radio, additional direct emergency telephone service, and, other types failing, an organized messenger service. Radio broadcasting stations are not used for air-raid alarms or pre-

cautionary instructions. The band just plays on. People might be excited and panics might be caused. Courage and keeping one's head are so vital during fires and bombing raids. Light signals are given to utilities before sirens sound. Utility spotters sound local horns when air raiders are overhead. Employees are used in shifts during the night for fire spotting. From all accounts, very few electric and gas plants have been put out of commission and the damage done by bombs has been speedily repaired.

IT is reported, in the great bombing of Coventry, that the gas works was hit four times but never ceased production and that service was restored in some cases by laying pipes on top of the ground a short time after the all-clear signal sounded. The manager of the Coventry gas plant jokingly said that with just a few more bombings he would have a much needed new plant.

It is reported that sand bag protec-

PUBLIC UTILITIES FORTNIGHTLY

tion is of great value. The sand must be dry, the bags filled from one-half to two-thirds full, and ends turned over and not tied, so that when piled together they will form as tight a wall as possible. Thus, they offer the greatest resistance to impact. Station windows have been bricked up and L-shaped walls erected at doors. Most of the protective walls placed around vulnerable spots and machinery are of brick, some 20 inches in thickness, and of sufficient height to protect apparatus from falling timbers. It has been found that bricks made out of ashes are particularly good, because, instead of brickbats flying in all directions, fragments tend to pulverize.

It is reported that bombs of from 100 to 500 pounds will make craters in the streets from 5 to 10 feet in depth. Water, gas, and sewage pipes will be broken at a distance of from 30 to 50 feet from the point of direct impact. This is due to the earth shock. Many electric and telephone cables have been found to stretch and not break, even though they are on crater's edge. One great difficulty in these craters is of water and sewage getting together, but so expert have the repair crews become on the handling of this damage that sewers are shut off or shunted so that the drinking water is not contaminated. A quantity of chlorine is generally inserted in the water main where these breaks occur. Practically no typhoid fever has occurred during the last two years in Great Britain.

ENGLISH buildings are largely made of brick and many of them have been standing for years. These buildings have been particularly subject to lateral bomb shocks. Such buildings as

have been framed with steel, similar to those commonly used in the United States, are little damaged. Steel girders seem to give and bend and only the walls and partitions are damaged. In the building up of London's bombed areas, no doubt, in the business sections, steel construction will be required on account of its ability to withstand air attacks.

I cannot find that there has been any case of sabotage reported in either the gas or electric companies of England. I do feel, however, that preparation should be made against accidents and sabotage which we are likely to experience.

In addition to all damage from air raids which the utility employees have had to cope with, there has been a tremendous shift in English population. (See chart, page 533.) This shift in population is particularly true of the east coast area, a portion of which has been evacuated for military purposes, but principally workers have moved to obtain employment in factories in the West and in the interior.

No new automobiles have been produced during the last two years. No tires for the last year; three gallons of gas per car per month is the fuel ration. So many workers have had to move near their factories and use bicycles. This will be ultimately the same in the United States as we are following the same trend, cars and tires now being rationed.

IT will be of interest to the reader to watch the trend of manufacturing, distribution, and sales in industry in the United States, and note how near parallel to trend is to that of England. England started in 1938 after Munich

BRITISH WAR EXPERIENCE

to prepare and carry on business as usual. We started in 1939 to do the same. England started priorities, excise taxes, rationing—we have followed about twelve to eighteen months afterward with the same plans. This is another reason for familiarizing ourselves with what has taken place in a business way in England.

All important contacts and documents held by the utilities have been triplicated and filing is done in three separate areas for protection. This, in itself, must have been quite a problem.

The production of gas and electric appliances has been restricted. First, a wholesale tax of 33½ per cent was placed on all new equipment. This tended to reduce the output. Next, priorities on material of appliances manufactured were made so rigid that no production was possible except for hospitals, emergency canteens, and army requirements. One interesting thing, however, is that all factories are permitted to produce repair parts for appliances and plans on a number one blanket priority rating. Thus, appliances in bombed homes have been quickly repaired and moved to those areas which have increased in population. This is a very interesting point as priorities with us are becoming more and more acute; but, if we could be permitted repair parts, we would be able to carry on.

DAMAGE to plant and distribution systems, by air raids, is paid for out of a special insurance fund, 50 per cent by the government and 50 per cent by a mutual insurance fund contributed to by all utility companies. The damage to the workers' homes is taken care of through a similar insurance scheme which permits quick relief to those in the lower-income class. Every worker and every company employing workers must have an air-raid shelter. These shelters are not a protection against a direct hit, but are a protection against lateral forces.

All employees, besides their regular duties of trying to take care of their home and family during air raids, are subject to fire-spotting duty, auxiliary fire fighting, first aid, the home guard, and air-raid warden. No compensation is given for any of these jobs except that on a fire watch during the night a free breakfast is provided. Men who are color blind are wanted as observers by RAF. They can see through enemy camouflage. A flying squadron of carpenters repair or condemn all bombed houses. More than 70,000 were repaired in one week's time during September, 1940.

Labor has been coöperative to the point that strikes have been eliminated during the emergency. Differences are settled in prewar manner by conferences. Failing in this, the mat-



Q "... various types of camouflage were used in England to make plants more difficult to spot from the air. This was worked out in conjunction with the British Air Force which made observations at various levels. A new smoke and fog camouflage has been developed that will blot out a blast furnace, electric or gas plant, from the air pilot's vision within a few minutes' time after first flash of air-raid signal."

PUBLIC UTILITIES FORTNIGHTLY

ter is brought up to the Arbitration Board whose findings are final. The hours of labor have increased, now being some fifty-six to sixty hours per week per worker. Total earnings thus have increased approximately 30 per cent, largely due to the additional hours. Some three out of eighteen million workers' wages are adjusted by the Cost of Living Index. The latest report shows that the cost of living has increased about 30 per cent, the same as the workers' income. It has been found that workers can produce more by having one day off in seven.

ALL women in England between the ages of eighteen and thirty-one have registered. They are placed wherever they can best advance production. After a short apprenticeship they are paid the same wages for the job as was the man. This is new and far reaching. A board examines all women, who would like to go to the farms from the city, for physical condition and mental attitude toward farm life. About one out of three has been accepted. I quote from a letter received from my friend, Michael Milne-Watson, an executive of the British Gas Light and Coke Company, of London:

The London gas companies are calling for women workers to replace men on active service. Dozens are already employed but many more are needed.

Many who have never before worked outside their own homes are now busy in gas plants and taking their turn on night shift, even though this means working through raids. This is no mean test of courage in view of the many air attacks on gas works. The women are acting also as bricklayers or fitters' laborers; they load coal, paint purifiers, and do a dozen other man-sized jobs.

Women are busy on district work. They read electric, gas, and water meters, collect coins from automatic meters, and undertake maintenance work on cookers, fires, water

heaters, etc. As a rule housewives express surprise when the women first appear. "Lady gas men now, I see"; but they receive the women kindly and, the job over, a cup of tea is often offered. In most cases the woman gas worker's children are evacuated and her husband has joined the forces so she is free to do war work.

The British utilities have found it advisable to work out a special clothing program for their lady workers: Blue overalls in the work shop, blue slacks with red-piped jacket and cap for meter collectors, uniform skirts for meter readers and maintenance workers. This program is important because of the British clothes rationing which has created quite a stocking problem for the ladies, and because the nature of some duties is hard on hair shampoos and so forth.

EVERYTHING possible is being done to discourage buying of non-essentials. Supplies to retailers are limited, being rationed on a percentage basis of monthly prewar demand.

So far as I am able to learn there have been no restrictions to date placed on the use of gas or electricity. Rationing was discussed at one time but found impractical so no restrictions apply at the moment.

Home service departments have played a very active part in demonstrations and publishing cooking recipes for the better use of rationed foods. They have also taken an active part in the set-up of emergency canteens and cooking centers. The English people have not taken kindly to these cooking centers as they much prefer to eat at home or in smaller groups. Many arguments have been advanced that foods can best be handled by large restaurants but this has never appealed to the people.



Outfitting the Lady Utility Workers

"THE British utilities have found it advisable to work out a special clothing program for their lady workers: Blue overalls in the work shop, blue slacks with red-piped jacket and cap for meter collectors, uniform skirts for meter readers and maintenance workers."

The Ford Motor Company recently made a donation of \$1,000,000 worth of portable kitchens which can quickly be transported from one locality to another when needed. At the beginning of the war much food and grain were stored in underground cellars, particularly prepared for this purpose.

All employees and the population live in fear of poison gas attacks. Continual training and preparation are being conducted to meet such attacks and with all of these problems the utility workers continue to maintain service and the people of England continue to carry on with an undaunted spirit.

As I receive and study information from England, I am amazed at the number of civilian organizations that have been set up to meet whatever emergency arises: Air Wardens; First Aid Parties; Ambulance Services; Rescue and Demolition Parties; Decontamination Squads; Unexploded Bomb Squads; Auxiliary Services; Auxiliary Fire Service and Fire Brigade; Emer-

gency Shelters; Emergency Canteens; Home Guard; etc. All of these are voluntary organizations and are managed by both men and women over military age.

DUE to the increased cost in operation, the majority of the gas companies have increased their rates, mostly on a percentage basis. For a long time in England, the commission has permitted an increase or decrease of rates based on a fixed percentage of earning. (Washington plan so-called here in USA.) Thus, in war times the companies can more quickly secure relief than would be possible if operating in the United States. Forty-three per cent of the operating electric utilities have made increases in rates, but the output of electric companies has been greatly increased due to the large number of war factories operating on a 24-hour basis.

On completing this survey of the activities of the English in the face of

PUBLIC UTILITIES FORTNIGHTLY

a great crisis in which our colleagues in the utility industry are playing their own heroic rôle, one's mind travels quickly back across the Atlantic to our own country and its utility industry which is now preparing for civilian defense and all-out war effort.

In April, 1942, one cannot conceive of Americans being subjected to the same type of blitz that has been England's lot to suffer. However, here in the United States we are liable to be subjected to token air raids for the purpose of creating fear and destroying morale.

Our enemies are liable to try other types of military, incendiary, and germ surprises. Against such attacks our greatest civilian protection is training. Training of each utility employee, man and woman, just the part they must play in defense. Organization and training by local defense councils of sufficient personnel to meet all such emergencies likely to arise. Such organization can be easily expanded where a nucleus of a trained group exists in each division. Many of you remember the 1917-1918 Red Cross disaster local organizations to care for emergencies. I saw the Brockton, Massachusetts, organization called into action to fight influenza, handle homeless families after large fires, and the feeding of the unemployed to preserve health. The departments effected were expanded rapidly, functioned efficiently without loss of time.

OTHER protection will be developed by the defense council as conditions warrant but thorough training in first aid, fire fighting, air wardens, emergency canteens, ambulance service, all types of auxiliary and information service set up by, and directed by, your local council are the greatest of all civilian defense measures.

Utilities and manufacturers should acquaint themselves with the mistakes and successes in defense of property of their brother organizations in Great Britain, and, when conditions warrant, adopt such of these successful measures as are deemed wise by the local defense council. In the first World War, it was estimated four men were required behind the lines to one on the firing line. In World War II, it is estimated eighteen men are required behind the lines to one on the firing line. Thus, the utilities have a more vital part in supplying power to industries.

Since December 7th, we are aroused; we are united; we are confident that nothing will sway us from the defense of a country and these social, economic, and political principles in which we all believe. Halfway through the brief history of our own country, Lincoln expressed in his own simple, direct way what should be the universal prayer of us all. He said, "Let us have faith that right makes might; and in that faith let us to the end, dare to do our duty as we understand it."

Q "UNTIL final victory is achieved, all of this nation's vast resources of men, materials, and machines must be directed to the production of an ever-increasing quantity of war materials at an ever-increasing speed. There can be no compromise with the achievement of this objective. Everything else is secondary to this purpose."

—DONALD M. NELSON
Chairman, War Production Board.



The New Order Comes to Middletown

What is the war doing to the typical American town? What will that town be like when the war is over? It is not too early for utilities to begin thinking and planning in terms of the greatly changed *post bellum* community.

By HERBERT COREY

THE name of the town might be Middletown. It is in the Middle West. For two generations it has been quietly prosperous. Not many millionaires have been made in Middletown; but its people have been comfortable and happy. It has the usual equipment of good schools, many churches, and policemen who unbutton their tunics in hot weather and patrol on the shady side of the street. Electric rates have been declining and current usage increasing during the past twenty years and the wives cook with electricity and do not bother if a youngster forgets to turn out his bedroom light in his scamper to keep a date. At eleven o'clock the glittering displays are turned out on the movie marquee and

at midnight the night clerks in the three hotels begin to sink lower in their easy chairs. Except that there is no such thing as a typical American town, Middletown is typical.

Middletown is dying.

Two factories have put the butter on the town's bread. It could have lived mildly as a county seat, for there are good farms around it and the taxes have never been high. But enterprising young men sold stock to every resident who had \$100 in cash, and the company to build electric refrigerators paid dividends almost from the first year. The "iron works" had been a money-maker for twenty years. Other little enterprises clustered around them, as is the habit of industry.

PUBLIC UTILITIES FORTNIGHTLY

THERE are thousands of such small cities in the United States. Some with one industry, some with as many as half a dozen. Not all will be killed by the war. Some will be tremendously speeded up. They are the fortunates whose industries can easily be converted for war use. Others will be deadened. Men who have worked all their lives in the same room will be transferred to distant cities. Wives and children will be left behind. Brigadier General Hershey, directing the draft, has said that before the war is over he expects to see every able-bodied man and woman of fit age mobilized in some capacity. Other cities will find themselves suddenly overrun with a horde of strangers. Able men, no doubt, hard-working, lonely, some of them not inclined to spend their leisure hours with good books. None of this can be prevented. All of it must be accepted as a part of the price we must pay for eventual victory. But we might as well face the fact.

The pattern of American life is being changed.

Take Middletown as an example, for there the change may be seen. The refrigerator factory and the iron works might have been converted to war work, for their machine tools could have been adapted to the new needs. But the little city is, unfortunately, somewhat to one side of the direct flow of raw materials. The two factories have been able to exist partly because of good management and partly because they have been doing a kind of neighborhood business. The War Production Board cannot afford to haul material past other towns in which are factories for the sake of keeping Middletown alive. Days and miles can be

saved in delivering the items made in these other towns to the assembly lines. Donald Nelson and his aides are tough and they are getting tougher.

“WE could save these towns if we had time to spare,” Nelson will tell you.

But there is no time to spare. For almost two years this country dawdled and foozled. We bragged. We talked in utterly fantastic figures of plane and tank and gun production. We were proud when we could say that we would soon be producing 1,000 Garand rifles a day. Soon. But to arm 7,000,000 men—that's the rating for the new Army—we would need 7,000 days. Not even Pearl Harbor waked us up. We passed the buck to a General and an Admiral and said nothing about the two years. No one wanted to get tough with the farmers and union labor. We played some cheap and some dirty politics. It took Douglas MacArthur and Nazi submarines off Long Island and Japanese signalers in California to get us going. We may be operating at one-fifteenth of our potential now. At the end of the year we will have reached our feasible top. In 1943 the civilian population will be getting just what it must have in order to keep strong to work on the war machine.

No one complains. The point I am trying to make is that we will never see the old pattern of life again. The new pattern which will come after the war may be a better one. It certainly will not be the same.

Two of Middletown's hotels have closed. There was no point in keeping open for guests who did not come. The night clerk in the third is a Major and the proprietor sleeps behind the desk.

THE NEW ORDER COMES TO MIDDLETOWN

His wife runs the house during the day, from desk to kitchen. One of the three dairies has folded and the others have combined. The two youngest pastors are chaplains. The electric light company has the dickens of a time making repairs, for the young men have gone. They could have been deferred but they volunteered. The assistant superintendent of schools has learned to drive a tank.

THE banks are getting along very well without the clerks who have gone to Washington. Not much business, anyhow. Many of the girls have gone to factory towns, along with all the workmen from the closed factories. The doctors and dentists are being run through a sieve. Some of them will certainly be taken for the services or assigned to other communities which need them. The street car company clanked itself into oblivion some years ago but it is getting old cars from junk yards and digging out its buried rails. The busses have been taken to cities where they are needed more than Middletown needs them. The town has cut down on the street lights. Taxes are no longer equal to the load. First-rate small houses may be had at a buyer's price. Middletown will never be a ghost town, for it is in the midst of a good farming country. But it may never again be the town it was. The refrigerator company and the iron

works will have lost their markets. Their brand names will have been forgotten. The policemen do not patrol any more. Nothing to patrol for.

If you think this is a wail, you are mistaken. The pattern of the Middletown people has changed. It has been changing constantly at a terrific rate. Once the pattern included a long rifle for Dad and a three-legged milking stool for mother. Then bath tubs and gravel roads and 3-minute trotters came into the picture. Presently the base-burner gave way to a heating contrivance that was ultimately managed by a push button in the front hall. The cottage organ became a radio on which, if you felt like it, you could hear a hoarse man with a trick mustache blather in Berlin. It was no longer necessary to send a telegram when Mother's birthday letter had been forgotten. Long distance would get her on the wire. Old gentlemen with arthritis were doing sixty on the roads and the kids were learning to fly from fields on which their grandfathers were called out on the third bounce. Yesterday's pattern does not matter much to people who make patterns at that rate.

EVERYTHING the world is fighting with in this new kind of war began right here. Look it up. The plane, the tank, the repeating rifle, the automatic pistol, the hell-roaring automobiles for Generals, the balloons, the



"MIDDLETOWN will never be a ghost town, for it is in the midst of a good farming country. But it may never again be the town it was. The refrigerator company and the iron works will have lost their markets. Their brand names will have been forgotten."

PUBLIC UTILITIES FORTNIGHTLY

parachute, the rubber bridges, the tracer bullets, the submarine, the ears that hear miles under sea and more miles in the air, the torpedo, the shell that bursts in air immediately over an oberleutnant instead of waiting to hit the ground. All American. If we had wished to bother with them we could have been pretty competent savages ourselves. But they did not fit into the pattern of life as we saw it then. We're fitting them in, now. The people who can do what we have done can draw a new pattern when the war is over. Maybe a better one. It may take us a little while to get the smoke out of our eyes. Then we'll get complacent again. That was a pretty good way to be, by the way. Come the day—

But in the meantime.

The utilities will be among the first to feel the strain. The people have been asked to cut down on the number and length of their telephone talks. If they are not nice about it there is a distinct suggestion that offenders will suffer. The girl who hangs on Harold's lips for twenty minutes—there are such girls: I know one—kindness of Alexander Graham Bell—will cause her papa to lose his telephone. Monitors will be put on the telephones of persistent offenders, and if the talk seems to be merely a social hour it will be cut off. Hours may and very likely will be fixed during which nonbusiness calls will be prohibited. WPB has made it clear that no expansions will be permitted except for war needs.

ALL this will have an effect on the pattern of life, which will continue to be felt after the war. Perhaps we will learn to use that useful instrument, the telephone, with the considera-

tion it deserves. There will be towns which will be almost stripped of telephones, like Middletown is today, for a telephone is useless if there is no one to use it. Will we scream for more telephones when the war is over? Or will we have lost our liking for the wire? In England and on the continent the telephone is hardly used at all, in comparison with the American habit. In Paris one used to send "*petit bleus*"—a special delivery letter—because they were faster than the phone.

Fewer electric irons will be used in the next few years. Those now in use will wear out and those now for sale will be sold, but no more will be made. They will not be needed as much as they have been. Seven million men will be in uniform and that subtracts perhaps 21,000,000 weekly sheets from the ironers, not to speak of pillow covers, shorts, shirts, and country club pants. The ladies will not need to iron so much, for the men will be at camp. Don't tell me the ladies dress for the eyes of other ladies. They dress to catch the roving male, and the light that lies in other ladies' eyes tells them whether they are on the beam. If there were no men on the reservation the ladies would be content with sackcloth lightly powdered with ashes. These reflections may be extended to include washing machines. Our girls will continue to be sweet and fragrant, but their dress materials will be few and drab before the war ends. Already there is talk of a uniform shoe and that means—if it ever comes—that the shoe will be designed by some horrid old woman who hates high heels, open toes, and arched insteps. The American foot is the loveliest foot in the world, but this writer will offer a mild bet that if the reform-

THE NEW ORDER COMES TO MIDDLETOWN



Something New Has Been Added!

“THE pattern of the Middletown people has changed. It has been changing constantly at a terrific rate. . . . The people who can do what we have done can draw a new pattern when the war is over. Maybe a better one. It may take us a little while to get the smoke out of our eyes. Then we'll get complacent again.”

ers go to work on it that same foot will soon look like a pudding.

Do I hear a taker? Of course I don't. Cannot you see with the eye of the mind the kind of a woman who would design the kind of a shoe she hopes to put all young and pretty women in?

MIDDLETOWN's Main street will not be so lively after dark. Its drug stores used to buy lots of current to illuminate their big windows. In the future this will be a needless expense. Fewer doodads of the drug store sort will be for sale. Lipsticks, rouge, flesh-feeding creams, red paint for fingernails, and fancy soaps will be out or else cut to an irreducible minimum. A good many patent medicines will be discontinued because the chemicals that once went into them will be needed for war. White pants will be yellow be-

cause chlorine for whitening will be taken for gunpowder, and apples will have more worms because the spraying stuff will not be obtainable. Window space will not be needed for vacuum cleaners because soon there will be no vacuum cleaners or toasters or table grills for two, or electric coffee makers. Mamma will not need a new bell for the maid because the maid will be at work in a powder factory. Mamma will go get it herself, greatly to Mamma's benefit, because rubber girdles will be among the things that have gone before. No pun. Puns are filthy.

There will be compensations, of course. Hot dog stands will fade out, because people who cannot buy new tires and who will get gasoline on ration tickets will not go helletehoop through the country on Sunday. Huge advertising stands will little by little rot down and not be replaced if people can-

PUBLIC UTILITIES FORTNIGHTLY

not drive out to look at the landscape and not see it. There will be moving about, of course, and a few roadside restaurants and here and there a "tourists' home"—and if there is a more totally cockeyed title than that in the history of nomenclature let's hear it—and a few small-town hotels will hang on.

BUT the summer resort business bids fair to be as totally dead as Caesar. Once we were a hardy people and were willing to ride on dusty trains with the windows open in order to get near enough the sea to see the girls in flapping bathing suits. Now that the girls have taken their wraps off, it is doubtful if we will bother with them at the cost of open-window railroading. After all, we have satisfied our curiosity. In any case the railroads may not have the trains to run, what with freight and soldier transportation. We've been spoiled by the sedan. Family men, who for years have scrimped to pay the first cost, the overhead, the taxes, the painting, the repairs, and the innumerable whatnots that assemble about even small places in the mountains or by the waterside, will not be able to send the family to the country. No tires, no gas. The bright spot here is that the children will have no chiggers, either.

Housewives may return to the old American custom of putting up preserves for the winter. More of them would if they could be sure about sugar, for they will not be able to buy plenty of canned goods at the grocery. There is a possibility that the sugar shortage will be cleared away, for Cuba and Santo Domingo and Hawaii can furnish us all the sugar we can possibly

need if they are let. At present the sugar we have been eating on our cereal is being diverted to industrial alcohol, but industrial alcohol can be distilled from wheat, potatoes, oak leaves, corn fodder, and anything else that grows on the farm. The Farm Chemurgic Foundation has been telling about this for ten years. The only reasons why not, apparently, lie in the domains of business, politics, prohibition, and high-forehead meddling. These were all essential items in the old pattern of American life. They may be toned down in the pattern to come.

ASSUMING that the war will run on for an indefinite time, and no one assumes that it will end this side of victory, the list of things we haven't got will increase every day. Already men's clothes have had some wool subtracted. We may never dress in wood fiber and paper, as they do in Germany, but our suits will not be what they used to be. Mamma and the girls will not be able to put on tight pants and tunics, because they are not to be given tight pants and tunics because of the wool shortage. In any case, as soon as the follies which seem to be inseparable from the early days of an American war have been worked through, the government will take a sterner stand with the ladies. Those who "do war work" will be regimented, skirted, disciplined, and paid. If the government is strong enough to put this over and get rid of the ornamental battalions it can lick any combination of nations on earth. Those who did not lay in a stock of pillows are out of luck. Duck and goose feathers have been taken for the services. But it is hardly worth while to continue along this line. The lux-

THE NEW ORDER COMES TO MIDDLETOWN

uries we have regarded as necessities are to be taken away from us. That sums it up. The people will have just what they must have to eat and wear and stoke fires with and no more.

That is just what Americans had when they created that first pattern. They seem to have been pretty good people, too. At this moment I know of a little village in a cleft in some of the hills not too far away from Washington which is as pre-Revolution as my greatgrandfather was. Its one concession to modernity was a garage and the garage has been closed. There has never been a telephone in that village. The old stone hotel serves its overnight guests with water in pitchers.

"I know what you want to ask," the old landlady says. "The place you want is back there on that hill, under that tree."

BUT the last time I was there I got, for twenty-five cents, the best meal served that day in the state, and I am not going to tell what state because I will not help to spoil that little hotel. Home-smoked ham; eggs in every kind of a dish ever invented; cheese made on the farms back in the country that was as good as Pont l'Eveque; cakes and pies and thick milk and yeast bread that was more fragrant than any bouquet; jams and preserves and jellies.

We could stand that kind of a life pattern for a long time, it seems to me. But we will not. Americans are not the kind of people who would revert to wooden shoes and shawls, no matter how pleasant might be the offerings of the table. We have tasted the good things of life and we will have them again. The new pattern will set a mark for all the rest of the world to shoot at, when we have won the war.

CONSIDER for a moment. Here we have 132,000,000 people, most of whom have been eating at the first table, and all of whom wish to do so. When the war ends we will be so far in debt as a nation that the star Betelgeuse will be just another astronomical detail to us. A kind of a street lamp on our corner. I do not know how that debt can be disposed of and neither does anyone else, and if you do not believe it examine the statements and speeches and letters of our current chiefs. If you can find any definite and intelligible formula in any one of them you can cook it for soup. But 132,000,000 people will want things. They will want a taste of color and speed and ease and fun while they are yet alive. No automobiles are being made today. We stopped making the best automobiles that were ever made in this world because we had to carry on a war.



Q"THE men who make electrical gadgets for the home and farm and industry will be thinking every minute they are not fighting. They know the market will be waiting for them. They know the competition will be hard—unless government, God Save Us, tries to tell the rabbit how to run—and that it is only competition that hammers the iron of idea into the tool steel of success."

PUBLIC UTILITIES FORTNIGHTLY

BUT while that war is going on the finest engineering brains in the world will be thinking what to put in and on the post-war automobile. Some of the engineers are too old to go to war but they are not too old to think. Some of the younger ones will have been at sea or in the jungles or maybe in Piccadilly, and because they are alert and inquiring every minute's leisure will be filled with reflection out of which ideas will grow. The men who make electrical gadgets for the home and farm industry will be thinking every minute they are not fighting. They know the market will be waiting for them. They know the competition will be hard—unless government, God Save Us, tries to tell the rabbit how to run—and that it is only competition that hammers the iron of idea into the tool steel of success.

A whole world will be coming to us

for the things that the United States can make better than any other country on earth. We may not have any money to give the other countries when the war is over, but somehow even the most thoroughly bankrupted land can always find a little money for something it must have. For a time we will have prosperity, unless the premises as stated are all wrong. Then it will be up to us to hold it.

But, even now, one can catch a dim glimpse of the new pattern. Because Americans are the kind of people who make patterns. Look at their history of fighting and failure and ruin and killing and moving on and civil war and feuding and gambling, and then try to make yourself believe that a hard bunch like that cannot make a new pattern when they get around to it. You cannot do it.

More power to 'em.



The Constitution and the War

“OUR Constitution at the time it was adopted was a document far in advance of its age. Even today there could be no nobler statement of part of our war aims than one particular part of that Constitution, the Bill of Rights. But that part of our Constitution which deals with the mere machinery of government must now be candidly reexamined in the light of the present crisis.

“The Constitution exists for the country, not the country for the Constitution. We must not make a fetish of a rigid legal document. We cannot permit ourselves to lose this war, or even to prolong this war, merely because we have become too hide-bound to reexamine and to change that document.”

—HENRY HAZLITT,

Editorial writer, *The New York Times*.



Is Silver a Public Utility?

Donald M. Nelson's announcement on April 7th that the WPB had concluded an arrangement with the Treasury for the use of 40,000 tons of silver as bus bars marks an important contribution to the war effort. Not only is valuable copper to be saved in the new government-owned and government-financed aluminum and magnesium plants, with a saving in the cost of constructing those plants, but, we may hope, the way is now open for other important industrial uses of silver.

By HERBERT M. BRATTER

THE United States "monetary" stock of silver amounts to more than three and one-quarter billion troy ounces. Only about one-eighth of this vast hoard of metal—the greatest in history—is physically in monetary use. The remainder either circulates by proxy in the form of paper bills or lies idle in the Treasury.

The 40,000 tons of silver will consume the bulk of the 47,000 tons of the metal held idle in the Treasury's General Fund; but in the Silver Fund, a separate account, the Treasury holds an additional 39,000 tons of bar silver and \$483,000,000 "standard silver dollar" coins weighing about 373,000,000 troy ounces.

Silver is actually one of the most efficient industrial metals in existence. It has the highest electrical and thermal conductivity, is remarkably resistant to corrosion, and forms salts and compounds with valuable photosensitive and bactericidal properties. According to reports submitted to the OPM last year by the National Academy of Sciences, silver has numerous important

and very real possibilities as a substitute for tin, copper, antimony, and other strategic and critical materials. Those materials are now extremely scarce and growing scarcer, while the silver bullion which could replace them lies idle at West Point. The open market supply of silver is, of course, extremely limited. The recommendations of the scientists favor substitution.

THERE is a certain inertia which restrains industry from asking for "precious" Treasury silver for a mundane, if military, use and there are silver-purchase statutes which, enacted during the depression as inflationary measures with strong subsidy reasons, restrict Treasury action.

In a unique and valuable compendium, "Silver in Industry," which appeared in 1940 as a result of the three years' work of the Silver Producers Research Project at the National Bureau of Standards and elsewhere, Lawrence Addicks, one of the book's authors, stated: "The properties of pure silver are such that probably only

PUBLIC UTILITIES FORTNIGHTLY

the psychological barrier created by its inclusion in the precious metal 'ounce' class has impeded major expansion long ago. The container field, both metallic and nonmetallic, is enormous . . . easily the most promising field for immediate development . . . additions of silver to stainless steel may prove to have large tonnage possibilities . . . Silver bearings have a bright future . . .," etc.

On the specific subject of silver's electrical possibilities, Mr. Addicks further wrote (p. 472):

The field of silver-bearing contacts is rapidly growing. Major researches are under way in various laboratories dealing with the difficult physico-chemical problems connected with tarnish, wear, metal transfer, and sticking. When it is realized that even telephone contacts, though requiring but a few grains of silver to a unit, number in the billions in the system taken as a whole, a general adoption of silver can be seen able to account for many millions of ounces. The experiments in the collection of current through silver-bearing brushes are of practical importance; a real invasion of the generator brush field is quite possible. Altogether the use of silver for contacts may be said to be really just getting started.

THREE other brief excerpts from this amazingly revealing volume are of interest (op. cit., pp. 163-5):

Resistance to corrosion. As may well be expected, alloys containing a substantial proportion of silver acquire some of the nobility and corrosion-resistance of silver. It is less obvious, however, that a small proportion of silver may be surprisingly effective in increasing the resistance of a base-metal alloy to corrosion. For example, one per cent of silver, or less, converts lead into an insoluble anode suitable for the electrolysis of acid zinc sulfate solutions, inhibits pitting attack of lead-antimony alloys in sulfuric acid, reduces pitting corrosion of stainless steel and dezincification of brass. . . .

Bonding quality. By bonding quality is meant the intangible factors involved in brazing and soldering associated with fluidity, capillary flow, and alloying characteristics. Silver added to lead imparts good soldering characteristics, and silver in brass makes a superior brazing alloy. A welding rod of copper containing one per cent of

silver has superior welding characteristics also. . . .

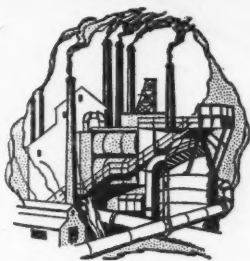
In conclusion, one point which should not be overlooked is the influence which a lower price for silver would have on its application in the alloy field. Alloys not commercial when silver is selling for \$5 a pound may be economically justifiable at a lower price. In addition, at the lower price, a larger proportion of silver in the alloy can be considered, and thought should then be given to the effect of more than 5 per cent of silver in engineering alloys.

The possibilities of silver bus bars in the utility industry were prominently discussed in the September 26, 1941, copper report, prepared by the National Academy of Sciences for the OPM. The report stated that "up to 75,000 tons of copper should be saved in an extreme emergency by substituting government-owned silver for bus bars and other large current-carrying parts."

KEEP in mind that the Treasury bids 71 cents an ounce for all domestic, newly mined silver, thus removing the entire production from the market. Moreover, foreign silver, the only silver therefore available to industrial consumers, is pegged by the Treasury at the artificial price of 35 cents an ounce. Consider, next, the following explanatory excerpts from the above-mentioned copper report to OPM. (The Treasury, it will be recalled, has made special agreements for the monthly purchase of Mexican and Canadian silver, thus limiting still further the amount of foreign silver obtainable by industry at 35 cents an ounce.)

For electrical conduction it should be possible to substitute silver for copper in certain places. In the intermediate sizes of conductor, such as in ordinary wiring, the [35 cents an ounce] cost of the silver would be excessive. If a part contains little material and requires much labor, silver becomes a very favorable substitute. In very fine wire, for instance, it is probable that the differ-

IS SILVER A PUBLIC UTILITY?



Silver Bus Bars for the Utilities?

“**T**HERE is a possibility of saving large amounts of copper by using silver for bus bars and the like. If the electrical resistivity of copper is taken as 1.72, that of silver is 1.63. The density of copper is 8.93 and that of silver is 10.53. Bus bars made of silver would have the same conductivity as copper bus bars if the silver weight is about 12 per cent greater than that of copper.”

ence in cost between silver and copper might not be too great for emergency use. If silver is so used, however, it is practically unrecoverable, and therefore its use might be questioned from the economic viewpoint. Furthermore, the possible copper saving in such instances would be small.

There is a possibility of saving large amounts of copper by using silver for bus bars and the like. If the electrical resistivity of copper is taken as 1.72, that of silver is 1.63. The density of copper is 8.93 and that of silver is 10.53. Bus bars made of silver would have the same conductivity as copper bus bars if the silver weight is about 12 per cent greater than that of copper. The cross-sectional area of the silver will be some 5 per cent less than that of copper. Consider, for example, the new aluminum and magnesium reduction plants which will soon be built. The government is expected to own these plants, anyway. It is understood also that the government owns nearly 100,000 tons of silver. If the copper shortage becomes sufficiently acute, enough of this silver could be earmarked for the bus bars for the aluminum and magnesium plants, together with sufficient for certain bus bar or high current-carrying lines elsewhere. The silver would be substantially as safe as in vaults, because operation is twenty-four hours daily, the plants will be guarded, and the lines will nearly always be hot. It is understood that there may be required as much as 25,000 tons of copper for the bus bars and con-

nectors in the new aluminum and magnesium plants alone.

It would seem that the government could, if copper became sufficiently scarce, use sufficient silver to replace 75,000 tons of copper for large conductors. It would cost very little to convert this silver into bus bar shapes and it would be available after the emergency by replacing, if necessary, with copper and returning the silver to bullion or storing it in bus bar form. May not the government excess silver as well be working to conduct useful electricity as lying idle in a vault?

WERE the Treasury to be authorized and directed by Congress to do so, it could make immediately available to industry thousands of additional tons of silver. At present, the law obligates the Treasury to buy silver and prohibits it from selling silver. Secretary Morgenthau on several occasions this year has publicly stated his opinion that all the silver purchase legislation should be struck from the books. Thus, the Secretary was asking for public pressure

PUBLIC UTILITIES FORTNIGHTLY

on Congress to act. The Secretary's testimony on January 9, 1942, before the House Appropriations subcommittee (hearings, p. 404) reads as follows:

SECRETARY MORGENTHAU: So far as I am concerned I will be glad to see Congress strike all of the silver legislation off the books.

MR. LUDLOW: Under present conditions, in my opinion it certainly looks like a subsidy if there ever was one.

SECRETARY MORGENTHAU: Right now the situation is that there is more and more use of silver for industrial purposes being made, and we cannot sell any of the silver we have, with the result that Canadian and Mexican silver is going into industrial uses, and with our mines producing it we buy it and put it away.

MR. LUDLOW: The metal is needed for industrial uses?

SECRETARY MORGENTHAU: For industrial purposes. For instance, now they have worked out a way of spreading a very thin coat of silver on cans, and yet we cannot sell it. I think it would be a very good time to strike the whole silver legislation off the statute books.

MR. LUDLOW: Do I understand that the accumulation of silver is so sacrosanct that it cannot be used for military purposes?

SECRETARY MORGENTHAU: Under the law we cannot sell an ounce of silver.

MR. LUDLOW: Do you know the amount of silver used by industry?

SECRETARY MORGENTHAU: It has grown by leaps and bounds. The increase in the use of silver has been simply amazing, for the past few months, but figures for this period are not yet available.

MR. JOHNSON of West Virginia: How would it help us if we gave you the right to sell it at this time, in the matter of the national defense bond market?

SECRETARY MORGENTHAU: Well, our own domestic users of silver are entirely at the mercy of the foreign people as to what they charge, but so far they have not abused it. However, if one of the foreign silver countries tomorrow wanted to charge 50 cents or 60 cents, they could do it, and we could not do anything about it.

MR. JOHNSON of West Virginia: That would increase the cost of articles in which silver played a part?

SECRETARY MORGENTHAU: Yes, sir; in the industrial use of it.

mined silver—would be helpful in controlling inflation and “well received”—a most important consideration today.

The Secretary's references to the growing industrial applications of silver are substantiated in industrial circles. The principal firm of industrial silver dealers stated in its annual report for 1941 that

Silver alloys containing only small percentages of scarce metals are being used in place of brass and nickel alloys. Pure silver wire is replacing copper wire in certain electrical appliances and small motors. As a plating material, silver is producing corrosion-resistant surfaces upon substitute metals that are satisfactory in other respects but lacking in this quality. Also, because of its peculiar properties, silver may be used in combination with lead to substitute for tin-lead solders, thus saving large amounts of tin. These and many other substitute uses will absorb increasing quantities of silver as there continues to be a shortage of other metals.

War requirements also are demanding millions of ounces of silver. This metal is playing an important part in the construction of ships, airplanes, tanks, trucks, guns, shells, bombs, torpedoes, and a wide variety of miscellaneous equipment. Its most extensive use is in the form of brazing alloys, but other compositions are employed in the manufacture of electrical contacts, and pure silver is used for making airplane bearings, photographic film, surgical materials, and pharmaceutical products. As the names indicate, these are not exclusively war items; nevertheless, they are being diverted in increasingly larger quantities to the Army and Navy.*

A full description of the present industrial uses of silver in the war makes amazingly interesting reading to the layman.

SILVER thus has very real industrial possibilities. With some adjustment in present practices, due to the high melting point of silver, we could save one-sixth of our tin by substituting silver-lead solder. We could recover thousands of tons of copper if the

* Handy and Harman, 1941 annual review of the silver market, pp. 12, 13.

THE Secretary also testified that repeal of the Silver Purchase Act of 1934 and the silver law of July 6, 1939—which relates to domestic, newly

IS SILVER A PUBLIC UTILITY?

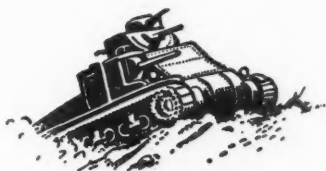
government would substitute silver bus bars for copper ones. Silver could be used inside telephone stations as a conductor and for contacts. There are many other large substitution possibilities. Silver is a highly efficient substitute for antimony in the positive plates of storage batteries: 50 tons will replace 2,000 tons of antimony.

For the United States to ignore these possibilities longer would constitute extreme negligence, virtually suicidal negligence for a nation whose existence is gravely threatened.

What the situation demands is: (1) Immediate repeal, as suggested by Mr. Morgenthau, of the silver purchase legislation which puts the Treasury into the market as a competitor of industrial buyers and potential industrial buyers of silver. (2) Congressional direction that the Treasury sell its silver to industry, and do so at a price which will be low enough to enable industry

to use it. The cost of the silver to the country should be no obstacle at all, in war time. Indeed, silver spokesmen have long claimed the silver "cost the Treasury nothing"!

FOR the government to continue to subsidize silver mining in war time is inexcusable. Where silver comes as a by-product of other metals, its production is unavoidable and must be accepted. But for real gold and silver mines, such a wasteful consumption of supplies, labor, and transportation is now indefensible. The miners now so engaged can be much more usefully employed seeking strategic metals. Silver is no longer a "precious" metal, but copper, tin, and antimony are truly precious to us today—vital. The initiative cannot come from industry. It must come from those directing the war effort in Washington, backed by public opinion.



An Ante Bellum View by Churchill

"THERE is one way above all others in which the United States can aid the European democracies. Let her regain and maintain her normal prosperity. A prosperous United States exerts, directly and indirectly, an immense beneficent force upon world affairs. A United States thrown into financial and economic collapse spreads evil far and wide and weakens France and England just at the time when they have most need to be strong. The quarrel in which President Roosevelt has become involved with wealth and business may produce results profoundly harmful to ideals which to him and his people are dear."

—WINSTON CHURCHILL (1937).



Fair Value Must Still Support The Rate Base

The recent decision of the U. S. Supreme Court in the Natural Gas Pipeline Case has raised the question whether any consideration need be given by regulatory bodies to the inclusion of present fair value in determining the utility rate base. Here is a brief and simple statement by a veteran of regulation, who for many years was a member of the Connecticut Public Utilities Commission, as well as its chairman.

By EDWY L. TAYLOR

To determine, in formal proceedings before commissions and through the courts, whether the return of a utility was excessive or confiscatory, it was measured by the reasonableness of the rate on some reasonable value of the property as a base.

Until recently that amount of money which a willing purchaser would pay and a willing seller would accept for the property was generally established as the fair value of the utility.

There is now a prevailing trend to compel the reduction of charges for public services by attempting to adopt an entirely new procedure in determining the rate base to make it lower. This would be done by subtracting from the original cost of the used and useful property the amount accrued in the depreciation reserve.

Those striving to reduce the charges for service may for the present be con-

tent with this. But later it is certain to lead to disappointment through deficient service, prevention of proper development and operation of the plant. It will increase in the wages of money because it will increase the investor's risk.

The base so determined, without consideration of other elements affecting value, is likely to be far from the fair value were it properly determined by the rule of the willing buyer and willing seller.

BEFORE adopting this new plan of finding the rate base its sponsors should consider how, later, it may not only fail to accomplish the end they desire but actually reverse what they wish.

It may well result in excessive charges destructive of the service.

This wrong theory entirely omits

consider
tion fr
busine
matica
in tur
the pl
wrong
chang
of co
to the
of wh
ductio
Neith
precis
adequ
accru
the v
U
railro
prop
tion
falla
and
road

W
sour
und
T
titio
serv
plan
poli
ser
plo
aff
all

FAIR VALUE MUST STILL SUPPORT THE RATE BASE

consideration of the affect of competition from other utilities or unregulated businesses. Such competition may automatically tend to control charges and, in turn, adversely affect the value of the plant and investment therein. This wrong theory takes no account of changes in price levels nor in methods of construction occurring subsequent to the construction of the plant, both of which may result in cost of reproduction less than its original cost. Neither does it recognize that the depreciation reserve may not fairly and adequately represent the depreciation accrued in the plant at the time when the value is determined.

Until a recent order of the ICC, the railroads did not accrue depreciation properly. The general financial situation of the railroads today shows the fallacy of so determining a base value and its uselessness in determining railroad rates.

WHATEVER plan of finding the rate base may be adopted, it must be sound and workable at any time and under all conditions.

The base value is affected by competition, change of the art, character of service, employee and public relations, plant maintenance and replacement, policy as to accrual of depreciation reserve, and funds for the benefit of employees and surplus accrual which is affected by dividend policy. These are all factors quite independent of "orig-

inal cost" or its more stylish variant—"prudent investment."

EXPERTS testifying as to value generally claim an allowance for "going concern value" which in some cases has been sustained and required by the courts. Its determination involves consideration of some if not all of the above elements.

"Going concern value" is not a feature which should be cast out. If determined fairly it may be "going value" in a real sense, a minus item, and thus reduce the base value. It is likely to be such a minus item in case the amount of outstanding securities exceeds the original cost. It would certainly be a minus item when the utility's rates, limited by what the traffic will bear, produce operating income above expenses insufficient to pay the interest and other charges on debt and preferred stock and something over for common stock.

The use of fair value as base value does not insure an investor against loss. But it will provide a continuance of safe and adequate service at reasonable rates. It cannot be a fixed and permanent value but one which changes from time to time as every factor used in reaching it may change.

Let us keep in the straight path in determining the base of value. In the long run it must be the fair value or injustice will be done to the ratepayers in some cases and to investors in others.

QA DRILLING crew shouted "Eureka!" when their drill struck a "gas pocket" near Brookville, Pennsylvania, recently—gauging 3,000,000 cubic feet a day. Then investigations made to see why such a flow should be only 4 feet underground revealed that an 8-inch pipe of a gas company had been tapped. The drilling contractor had to pay damages.



Wire and Wireless Communication

THE informal Easter recess taken by the House of Representatives during the first ten days of April suspended definite action on the Cox resolution to investigate the FCC. Representative Eugene Cox, Democrat of Georgia, author of the resolution, was acting speaker of the House during the informal recess. Certain developments, affecting Representative Cox personally, apparently convinced the Georgia critic of the FCC that he would rather await the return of the full membership before renewing his attack from the floor.

The developments affecting Representative Cox included a disclosure that the Department of Justice was investigating charges that Cox had acted as special counsel or in some other representative capacity for radio station WALB of Albany, Georgia. On March 28th, the New York tabloid newspaper *PM* published a story which revealed that the Department of Justice had been asked to investigate the exchange of \$2,500 in checks between Representative Cox and the Herald Broadcasting Company of Albany, WALB licensee. The Department of Justice confirmed receipt of photostats of these checks which *PM* stated were given to the company by the Congressman in payment of 25 shares of stock in the station.

Apparently there is no impropriety in a Congressman acting as counsel for a private client, except as to certain personal appearances as attorney in cases specified by Federal court.

APR. 23, 1942

It was expected that Representative Cox would take the floor soon after the full membership of the House reconvened on April 13th to denounce the Department of Justice-FCC investigation of himself as another example of the "Gestapo" methods which Cox claims the FCC employs against its critics. The Cox resolution was still before the House Rules Committee of which Representative Cox is the ranking majority member. Disclosure of the investigation into Representative Cox's personal affairs, unless it produces some real evidence of reprehensible conduct, was viewed in some quarters as likely to boomerang in favor of the Cox resolution.

ELSEWHERE in the House, the Committee on Interstate and Foreign Commerce was preparing to open its hearings on the Sanders bill on April 14th. This bill by Representative Jared Y. Sanders, Jr., Democrat of Louisiana, would amend the Communications Act so as to divide the FCC into two divisions: one for radio broadcasting and one for commercial communications carriers, and reduce the importance of the chairmanship.

* * * *

ON April 1st the FCC opened hearings on its investigation of charges made by hotels, apartment houses, and clubs for telephone service in the District of Columbia. The hearings were conducted jointly with the District of

Colum
Comm
as the
man C
commi

Wh
surcha
lishme
genera
ington
"guine
of ext
matter

In
peals
New
forbid
5 cen
hotel
and a
charg
guest

Ho
sion
form
merel
on ho
comp
order
conti
the c
appa
trict
miss
meth

For
ation
Fede
tion
the
had
trict
pass
Con
Dist
tor,

F
posi
tion
pur
terr
tion

WIRE AND WIRELESS COMMUNICATION

Columbia Public Utilities Commission. Commissioner Paul A. Walker presided as the FCC representative, while Chairman Gregory Hankin of the District commission represented the local board.

While the hearings were confined to surcharges by hotels and similar establishments accommodating guests, it was generally believed that the city of Washington was merely being used as a "guinea pig" to determine the desirability of extending possible regulation on this matter to other states in the union.

In New York state the court of appeals recently upheld an order of the New York Public Service Commission forbidding hotels to charge more than 5 cents extra on local calls placed by hotel guests from their room extensions, and also set a schedule of maximum surcharges on long-distance calls by hotel guests.

However, the New York commission did not attempt to establish any formal regulatory control over hotels. It merely promulgated general regulations on hotel surcharges with notice that non-compliance would be followed by an order to the telephone companies to discontinue furnishing telephone service to the offending establishment. It was not apparent whether the FCC or the District of Columbia Public Utilities Commission contemplated such a simple method of control.

FOR that matter, Joseph C. McGaraghy, representing the Hotel Association of Washington, contested both the Federal and local commission's jurisdiction over such charges at all. He made the interesting contention that Congress had placed such jurisdiction with the District Rent Control Administrator when it passed the District of Columbia Rent Control Act. Robert F. Cogswell, the District of Columbia Rent Administrator, supported this contention.

FCC Commissioner Paul A. Walker postponed a final ruling on the jurisdictional issue and stated that one of the purposes of the investigation was to determine whether his board had jurisdiction. Chairman Hankin indicated that the

jurisdictional issue would be disposed of after the hearing.

Mr. Walker also announced from the bench that the FCC on March 31st had denied the petition of the Hotel Association of Washington for dismissal of the proceeding. He informed the rent administrator that he would not be foreclosed from filing a brief in connection with the challenge to the jurisdiction of the commission.

Jurisdiction of the Federal commission over interzone message rates for calls between the District and near-by Maryland and Virginia also was questioned at the hearing. A provision of the Federal Communications Act says the commission does not have jurisdiction over "exchange rates" when they are interstate.

There was considerable interrogation of T. Brook Price, counsel for the American Telephone and Telegraph Company, during the outline of the company's case at the beginning of the proceedings, as to just how such rates would be regulated. Both Commissioners Walker and Hankin conducted the examination. Mr. Price said that the local exchange situation was similar to Kansas City's, in which the commission held it did have jurisdiction, and that he wanted to present the issue in the local case.

COMMISSIONER Walker presented a hypothetical case in which a call was placed from the District to San Francisco through a local switchboard. If the published tariff were \$6 and the hotel charged the party \$7, he asked, who would have the authority to say whether the rate was reasonable?

Mr. Price parried with the assertion that then it became a question whether the additional \$1 charge was for telephone service. If it were for telephone service, Mr. Hankin asked, does the District commission have authority to regulate it? Mr. Price contended that the charge was not for telephone service.

This legal question of jurisdiction is twofold: (1) Does the FCC or the District of Columbia Public Utilities Commission (which corresponds in Washing-

PUBLIC UTILITIES FORTNIGHTLY

ton to a state public service commission), or both, have any jurisdiction *at all* over hotel surcharges? (2) Assuming that such jurisdiction exists, how can it be apportioned on the basis of FCC control of interstate long-distance calls and local commission control over local exchange or intrastate toll calls?

On resumption of the hearings on April 2nd, fiery Gregory Hankin, chairman of the District commission, sharply cross-examined witnesses to find out why it costs 10 cents to make a local telephone call through a hotel switchboard and only a nickel at a coin booth.

L. Gardiner Moore, manager of the Shoreham hotel, stated that the Shoreham followed the practice of charging transient guests 10 cents for each local call. Permanent guests paid at the rate of 5 cents a call and an additional monthly service charge of \$1, an instrument rental charge of 50 cents, and a directory listing charge of 25 cents, he said. A 10 per cent surcharge on all long-distance calls made by either permanent or transient guests is also made, he said, up to a maximum extra charge of \$2 a call.

Moore said that he was faced with considerable evasion of these extra charges by persons who reverse the telephone tolls or have them charged to the concern that employs them. For the service of handling a reversed call, a 5-cent charge is made, he said. One such call was made recently to Sydney, Australia, after one of the hotel's operators worked a day and a half to make the connection, Moore said.

CHAIRMAN Hankin, during the session on April 3rd, made an interesting point when he suggested that the telephone companies might be violating the Clayton Antitrust Act. Hankin asserted that the surcharges could not be legally made unless the hotels and other places were acting as agents of the telephone company. If they were in effect agents of the telephone company their extra tolls would be subject to regulation by the FCC and the PUC.

On the other hand, if the hotels are not agents of the telephone company (and

the telephone company counsel had already stated that the extra charge was "not for telephone service") then they might be viewed as engaging, by concerted action, in a practice calculated to exploit the buying public under circumstances not open to free competition or ordinary standards of fair trade practice.

Rufus S. Lusk, secretary of the Building Owners and Managers Association of the District of Columbia, testified that the operation of telephone switchboards in 38 representative apartment houses in the District of Columbia had resulted in a 33 per cent loss. Operating telephones in these apartments during 1941 cost the apartment operators \$236,813.63, including telephone bills totaling \$155,658.45 and salaries to operators totaling \$81,155.18, he said, while tenants were charged \$182,275.11 by the apartment operators.

Most apartment houses charge tenants \$1 a month for the use of a telephone and 5 cents for each local call, Lusk said. A 25-cent optional directory listing charge is also made in many cases, he said. No extra charge is made for long-distance calls.

Operation of switchboards involves considerable additional service, including the taking of messages when the tenants are out, and wake-up service in the morning, he said. Arousing tenants often requires several calls.

Others testifying on April 3rd were E. E. Martin, manager of the Army-Navy Club; Frank Davies, manager of the University Club; L. Gardiner Moore, Shoreham hotel; Charles L. Hutchinson, Capital Park hotel; and Arthur J. Harnett, executive secretary of the Hotel Association of Washington.

* * * *

TELEPHONE company engineers in California are working out a system of blocking out all telephones in districts where telephone facilities become overloaded during an air-raid emergency. This was disclosed last month during a joint meeting of Los Angeles city and county defense council officials, where the

WIRE AND WIRELESS COMMUNICATION

telephone situation was discussed. Those at the conference were told that during previous blackouts, telephones became so congested by curious persons seeking reports from friends in other sections of the city that the flow of vital military information was seriously impeded.

The system being worked out by the engineers, W. R. Dressler, telephone company representative, said, will keep alive military telephones but will block out the ordinary subscriber. It was emphasized that the bad features of such a program are realized, and it was hoped that a campaign of education would stop unnecessary telephone calls during emergencies.

* * * *

PUBLIC telephones throughout Fort Dix, New Jersey, were disconnected on March 25th by telephone employees at the request of Army authorities to prevent unauthorized information on troop movements from being given out.

Suspended from each telephone mouthpiece was a small card with the words "Temporarily out of order, by order C. O." Telephones in service clubs, the Officers' Club, post exchanges, and headquarters building were affected.

This step was taken because members of task forces have been telephoning their families and friends, giving time of their departure and probable destinations. Soldiers now will be unable to notify their friends immediately of their departure by telephone, because the post telephone will not accept outside personal calls.

* * * *

WISCONSIN Telephone Company officials and attorneys met on March 30th with Attorney Harold M. Wilkie, special counsel for the city of Madison in the company's request for higher rates. Representing the company were Fred Sammond, of the law firm of Miller, Mack, and Fairchild; Francis Hart, company attorney; Charles Dwyer, chief statistician; and G. F. Crowell, chief engineer. The discussion attempted to limit issues to be tried on the company's

application for an increase in Madison, but no agreement was reached. It was understood that telephone officials want the test limited to the revenue and production costs of the Madison plant.

Sammond denied that the company was preparing to limit its case and decrease proposed charges on calls in excess of 80 on business phones.

* * * *

A BILL authorizing the voluntary consolidation of domestic telegraph companies and separate merger of international services was introduced in the Senate on April 9th by Senator McFarland (Democrat, Arizona). Senator McFarland said the bill carried out the recommendations made last October by a Senate Interstate Commerce subcommittee, which studied the domestic and international telegraph facilities. Companies consolidating would have to obtain FCC approval, he said.

* * * *

WITH manufacturing operations of the International Telephone & Telegraph Corporation system outside of the Western Hemisphere either under war restrictions or enemy control, the management of the corporation is said to be considering the construction in South America of an equipment plant to supply the growing demands of its Latin-American communications subsidiaries. Recently, IT&T obtained control of the Federal Telegraph Company at Newark, New Jersey, and it is utilizing this plant to handle in part the needs of various telephone companies in Central and South America.

No definite plans for a plant in South America have been formulated, it was said, but the corporation's officials were viewing with alarm the difficulties imposed in the manufacturing end of the business in this country through the shortage of critical materials and the operation of the priorities system. Whether IT&T could obtain a more plentiful supply of materials in South America, however, remained open to question.



Financial News and Comment

By OWEN ELY

Utility Financing Dwindles

DUE in part to the decline in price of junior utility securities resulting from proposals for heavily increased taxation, plans for utility financing seem to have slowed down. However, the only recent public utility offering, \$10,000,000 Union Electric first 3s of 1971, proved very successful. There were eight competitors for the offering, which went to Lehman Brothers and associates. The retail price was fixed at 109 $\frac{1}{8}$ to yield 2.87 per cent, and the bonds were largely taken up by institutions.

While nearly \$300,000,000 utility financing remains in registration with the SEC, very little in the way of immediate offerings seems on the cards, although the success of the Union Electric offering may stimulate the syndicate departments of the larger investment bankers to expedite work on the few deals where early SEC clearance remains a possibility. Despite the decline in junior utility securities in recent weeks (in the past few days there has been a modest recovery), utility bonds of the AAA type have been little affected by the recent tax proposals. The margin of safety in most cases would remain ample even with a 55 per cent tax, and the excess profits tax acts as a buffer against any adverse effects of increasing labor and material costs.

An offering of \$5,750,000 Illinois Commercial Telephone 3 $\frac{1}{2}$ s is currently expected. The Southwestern Public Service financing, described elsewhere, seems unlikely to reach the offering stage for some weeks. Central Power & Light Company (Middle West system) is planning a \$5,900,000 refunding program,

the new securities to be placed with institutions.

Public Service Electric & Gas Company has changed its plan to sell \$15,000,000 refunding 3s of 1972 to insurance companies, and will offer the bonds for public sale after competitive bidding. This will be a "new money" issue.

Public Service Company of Indiana plans to sell privately \$4,000,000 first 3 $\frac{1}{2}$ s of 1971. This is part of the proposed \$42,000,000 sale of last December, which was spoiled by the Pearl Harbor attack.

Standard Gas and Electric Company will take up the unsubscribed portion of the Louisville Gas & Electric Company (Kentucky) common stock offering. Only a small part of the offering (in which dealers showed little interest) has been affected at the sale price of \$23.50, which was generally considered too high when the offering was made last October. In order to pay for the stock at the original offering price, it is reported that Standard Gas and Electric will have to dip heavily into the funds obtained from the sale of the common stock of San Diego Electric and Gas, which had previously been "earmarked" for future retirement of its own debenture bonds.

Community Power & Light Properties to Be Realigned

COMMUNITY Power & Light Company, one of the first utility systems to consummate a plan of corporate simplification with SEC approval, controls some ten operating companies, either directly or through other holding companies.

It owns about 60 per cent of the

comm
ties, w
aggre
of the
system
It i
integr
vario
system
other
wester
000,00
will,
pande
It is p
the el
lic U
Mexi
Mexi
ties c
situat
Conti
of th
the p

Power Prod.	Net Income
325	55
300	50
275	45
250	40
225	35
200	30
175	25
150	20
125	15
100	10
75	5
50	0

FINANCIAL NEWS AND COMMENT

common stock of General Public Utilities, which controls properties with an aggregate book value about equal to that of the other properties in the Community system.

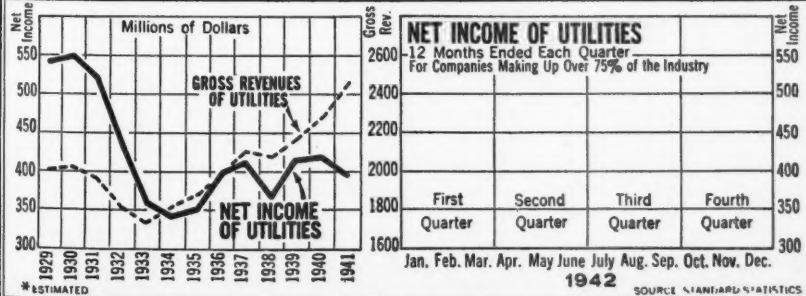
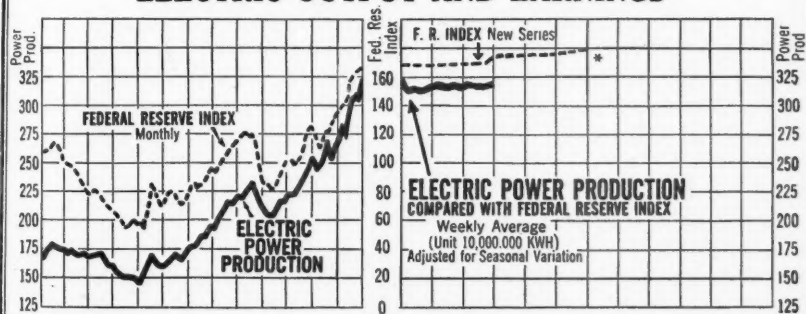
It is now proposed, under a plan of integration and simplification, to regroup various system properties and revamp system finances. (At some later date other changes may be made.) Southwestern Public Service Company, \$10,000,000 operating and holding company, will, under the new program, be expanded to several times its present size. It is proposed that the company acquire the electric properties of General Public Utilities situated in Texas and New Mexico, the properties of Texas-New Mexico Utilities Company, those properties of Gulf Public Service Company situated in eastern Texas, and (from Continental Gas & Electric Corporation of the United Light and Power system) the properties of Panhandle Power &

Light Company, Cimarron Utilities Company, and Guymon Gas Company. Gulf Public Service Company is to become a wholly owned subsidiary of Southwestern Public Service Company, and will transfer those of its properties situated in eastern Texas to the latter company.

The newly created system will service communities in Texas, New Mexico, Arizona, Oklahoma, Louisiana, Arkansas, and Florida. The system will have a wide variety of operations—about 78 per cent of revenues being derived from electricity—the remainder coming from gas, water service, bottling, and—to a small extent—steam heat.

Southwestern Public Service Company, which in its present set-up has a capitalization aggregating only about \$6,000,000, has registered with the SEC \$18,500,000 first mortgage and collateral trust bonds due 1972, \$5,500,000 serial notes due 1943-53, and 85,000 shares of 6 per cent cumulative preferred stock. It

ELECTRIC OUTPUT AND EARNINGS



PUBLIC UTILITIES FORTNIGHTLY

is expected that Dillon, Read & Co. will head a syndicate to handle the financing. In addition to the securities to be publicly offered, there will be 549,821 shares of common stock (maximum amount) of \$1 par value which will be issued in exchange for common stocks of Community Power & Light and General Public Utilities. Proceeds of the financing will be used principally for the purchase or redemption of system securities. Offering of the new securities will await approval of the entire program by the SEC and stockholders.

Arkansas Natural Gas Corporation

(This is the fifth article in a series of brief descriptions of leading natural gas companies.)

ARKANSAS Natural Gas Corporation is a subsidiary of Cities Service Company, and the Benedum-Trees oil interests of Pittsburgh are also represented on the board. The company was originally incorporated in 1909 in Delaware as the Arkansas Natural Gas Company. In April, 1928, the Natural Gas & Fuel Corporation and Industrial Gas Company were merged into it to form the Arkansas Natural Gas Corporation.

System funded debt amounts to \$16,875,923, and the stock consists of 2,187,568 shares of 60 cent preferred, 4,080,580 shares of common, and 3,522,271 shares of class A (identical with common except that it has no voting rights). Cities Service Company owns 40 per cent of the preferred stock, 24 per cent of the class A, and 75 per cent of the common stock.

The company's principal subsidiaries are Arkansas Louisiana Gas Company, \$57,000,000 natural gas distributor, and Arkansas Fuel Oil Company, \$48,000,000 oil company with its own subsidiary, Arkansas Pipe Line Corporation. Both gas and oil reserves are considered adequate. Arkansas Louisiana Gas Company produces and distributes natural gas (at

APR. 23, 1942

wholesale and retail), with over 3,400 miles of pipe line. The territory extends from Clarksville and Little Rock, Arkansas, to Shreveport, Louisiana, and Winstboro, Texas, the population served being about 421,000. The company provided natural gas supply facilities to ordnance and munition plants and an Army camp last year, and also in the early part of 1942 commenced the construction of a pipe-line system from gas-producing areas in southern Arkansas to aluminum plants in central Arkansas.

Arkansas Fuel Oil Company is engaged in the production, refining, transportation, and marketing of petroleum and has large holdings in Texas, Louisiana, and Arkansas.

Arkansas Natural Gas earned its preferred dividend during the depression years (except in 1932), but dividends were omitted during 1933-6; they were resumed in 1937, and in 1940-41 the company paid a total of 90 cents annually, reducing arrears to \$2.25. Earnings on the preferred and common stocks have been as follows:

Year	Earnings per Share	
	Preferred	Common*
1940	\$.74	\$.04
1939	1.13	.15
1938	1.08	.14
1937	1.96	.39
1936	2.40	.52
1935	1.09	.14
1934	.69	.03
1933	.89	.08
1932	.49	D.08
1931	.76	.05
1930	.91	.09

*Including class A stock, which shares equally with common.

EARNINGS prior to 1936 have been adjusted for the deficits of Louisiana Oil Refining Company, this controlled company having been absorbed by another subsidiary in 1936. The company's aggregate charge for depreciation and depletion in 1940 amounted to \$3,944,623, or about 13.4 per cent of operating revenues.

Earnings for 1941 are not yet available and the company does not report any interim figures. However, in view of the

FINANCIAL NEWS AND COMMENT

favorable trend of the oil and gas companies last year, an improvement in earnings over 1940 seems indicated, despite expected higher taxes.

At the end of 1940 cash amounted to \$5,254,978 and current assets were \$13,064,051 compared with current liabilities of \$6,685,871. The company paid off a note for \$1,204,244 held by Cities Service Company last July.

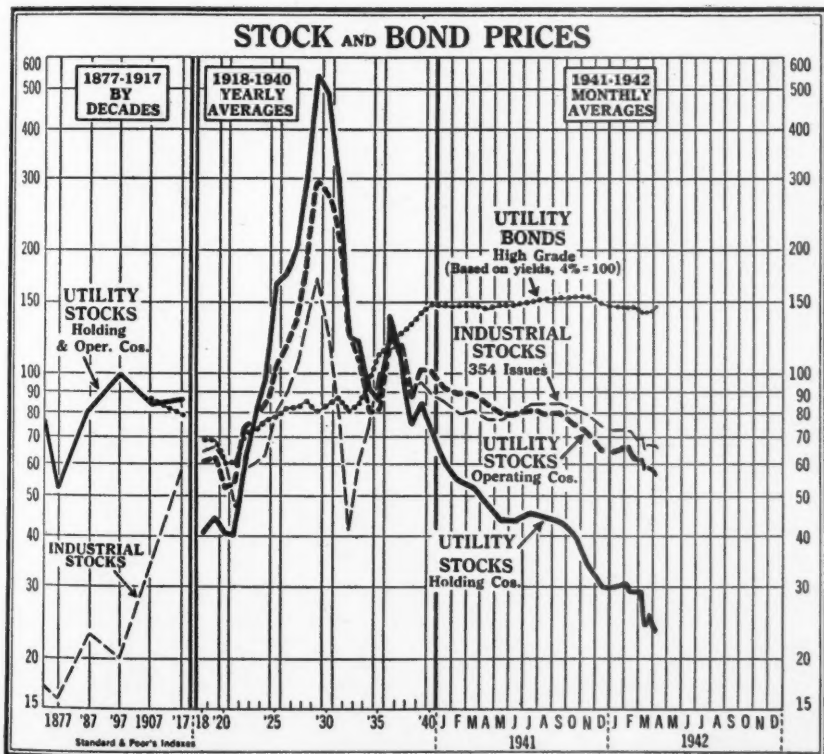
The company shares to some extent in the integration problem of Cities Service Company; eventually a separation of the utility and natural gas-oil interests seems indicated.

Arkansas Natural Gas preferred is currently quoted on the Curb at 6½, while the class A and common sell around ¾. Last year's range for the preferred was 9-6½, and on the common 2¾. The pre-

ferred has been fairly stable in recent years in a broad range of 5-11, while the common has remained around the general level of 1-4 with the exception of 1937, when it had a sharp run-up to 12½. The 1929 high for the common was 26 and the 1935 low ½, so that it is now around its record low levels. In this respect the stock seems to display the characteristics of a utility rather than an oil stock.

FPC Orders 5-Year Amortization of Excess Purchase Cost over Original Construction Cost

A FURTHER move to clarify valuation accounting procedure was made by the FPC on March 30th in Opinion No.



PUBLIC UTILITIES FORTNIGHTLY

72. The opinion involved two small companies—St. Croix Falls Minnesota Improvement Company and the Wisconsin company of similar name, the two together being capitalized for only about \$2,000,000. They are subsidiaries of Minneapolis General Electric, controlled by Northern States Power Company of Minnesota in the Standard Gas and Electric system.

The opinion was the result of a hearing on the commission's order requiring the two companies to show cause why they should not make certain proposed accounting adjustments in the reclassification of accounts and original cost studies filed with the commission, pursuant to the reclassification and original cost requirements of its Uniform System of Accounts.

The Minnesota Company is required to establish \$53,520.34 in Account 107, "Electric Plant Adjustments," as a write-up and to dispose of this amount by charges to Account 271, "Earned Surplus." With respect to an amount of \$8,444.15, representing the excess of corporate cost over original cost, recorded in Account 100.5, "Electric Plant Acquisition Adjustments," the commission requires that such sum be amortized in five years by equal annual charges to Account 537, "Miscellaneous Amortization." The Wisconsin company is required to take similar actions.

Interpreting the requirements of Account 100.5 of its Uniform System of Accounts, the commission said:

Except for fictitious or paper increments, which should be charged off at once (*American Telephone and Telegraph Company v. United States*, 299 US 232, 240), provision in advance of retirement should be made. In fact, such provision is mandatory under our, and most, if not all, systems of accounts. In practice, tangible plant assets are generally depreciated, whereas intangible assets are amortized. Accordingly, amounts in Account 100.5 should either be charged off immediately or spread over a reasonable period of time, if proper public utility accounting practices are to prevail.

The company claims the amount in question represents the cost of tangible property (in its original filing the company claimed the amount represented the cost of intangibles), whereas the commission's staff con-

tends the amount is associated with intangibles. As stated above, tangible fixed assets are generally subject to depreciation accounting and intangibles to amortization accounting. As Mr. Justice Cardozo pointed out in the *American Telephone and Telegraph Company Case*, *supra*, "The label is unimportant, whether depreciation or amortization, if the substance of allowance is adequately preserved." Our system of accounts provides for amortization. We will adhere to that form. . . .

There are two accounts in our Uniform System of Accounts for Public Utilities and Licensees to which the amortization charges could be made; namely, Account 505, which is in the operating section of the income statement, and Account 537, which is in the final or income deduction section. We are not here called upon to determine whether the amortization charges represent operating expenses in the fixing of rates. We are now only concerned with the classification of amortization charges. It is our opinion that such charges should be made to Account 537, "Miscellaneous Amortization."

THE commission also found that the profits accrued by an affiliated company from construction work performed for the two utility companies could not properly be included in these companies' cost of electric plant, since the contract was "not at arm's length." Hence, this part of the property cost was considered to represent "write-ups or inflation," and should be included in Account 107. In this connection the commission remarked that it was impossible to try to determine whether the profits paid to the construction company were "reasonable" and that it was also impracticable to compare the over-all cost with what might have been charged by a nonaffiliated construction company. (See also page 590.)

Apparently the FPC, following the trend of the recent Supreme Court decision, *is determined to enforce original cost as an eventual basis for rate making*. While the 5-year amortization requirement is not burdensome with respect to the small amount involved in this particular decision, the number of years allowed for amortization would be of serious importance to some large utility operating companies, as for example Pennsylvania Power & Light. Moreover, the question whether the amortization should

FINANCIAL NEWS AND COMMENT

be treated as an operating expense deduction or not, with its consequent bearing on rates and on earnings as reported to stockholders—which the commission does not here definitely settle—is also of great importance. It is possible that some of these questions may have to be clarified by courts.

The present FPC opinion does not appear to conform to "prudent investment" but goes the "whole hog" for original cost. Prudent investment, as interpreted in some quarters, would allow for some increase over original cost where this was fully warranted by changing conditions as registered in arm's-length sales between companies. Hence, the FPC would seem to be somewhat ahead of the Supreme Court in its insistence on razing all values subsequent to original construction, whether this occurred last year or fifty years ago.

Standard Gas Bonds Decline Sharply on Tax Fears

STANDARD Gas and Electric debentures, which sold as high as $92\frac{1}{2}$ last year on hopes that the liquidation program could be speedily completed, recently dropped to the 50 level as the new tax proposals aroused fears that interest payments might be in danger. They have currently recovered to 57. In 1941 Standard Gas (parent company) was able to cover its interest charges about $1\frac{1}{4}$ times, a slightly better showing than in the previous year, despite partial loss of the income from San Diego stock (the balance of which was sold July 9th). A preliminary analysis of the earnings and income of dividend-paying subsidiaries (together with Pacific Gas and Electric and Mountain States Power) indicates

that with a 55 per cent tax rate perhaps only about 15 per cent of the debenture interest would be earned, although with a 45 per cent rate at least 70 per cent should be earned.

The management is reported hopeful of obtaining a pick-up in earnings (exclusive of taxes) similar to that of 1941, when they were able to absorb the increase in the Federal income tax rate from 24 per cent to 31 per cent. Obviously, a pick-up this year would have to be substantially larger to produce corresponding results. Last year the system was fairly free of excess profits taxes, but any further increase in earnings might perhaps push Philadelphia Company—contributor of nearly half Standard's income—"over the line" into the $88\frac{1}{2}$ per cent tax bracket, in which case any earnings "pick-up" would be nearly all absorbed by taxes.

However, if Philadelphia Company could avoid the excess profits tax, a pick-up similar to that of 1941 would be a substantial aid to Standard Gas, possibly enabling it to cover interest in full with a Federal income tax rate of 45 per cent. (With a 55 per cent rate, however, only about 40 per cent might be covered.) Because of the many technical problems involved these estimates must be considered highly approximate, and are used only for illustrative purposes.

While Standard Gas and Electric's parent company balance sheet for 1941 has not yet been published, it seems probable that there is at least a year's interest requirements available in cash, and judging from the 1940 surplus account a substantial part of this could be used to make up any deficit in income. However, this necessity might not arise with a tax rate of 40 per cent, or perhaps even 45 per cent.

"MEN will not sing or march or die for the AAA or the REA or for social security."

—RAYMOND MOLEY,
Contributing editor, *Newsweek*.



What Others Think

General Electric's Post-war World



IN the March issue of *Fortune* magazine, General Electric of Schenectady, New York, gets a good going over by *Fortune's* editorial staff. Under the title "GE Does It," the article reveals, to an extent permissible by war censorship, the length to which this well-known manufacturing concern has been converted to war industry.

For example, there is a picture of an \$18,000,000 cruiser, with an accompanying chart showing how 35 major items of the cruiser's construction are turned out by General Electric. But of more unique interest are the concluding paragraphs of the *Fortune* article under the subhead, "GE's Post-war World." There may be a thought in this for other manufacturers as well as operating utilities, who feel that it is not too soon to begin thinking in terms of recapturing lost civilian markets, come the day of victory.

General Electric, according to *Fortune*, has analyzed the post-war market to a pretty fine point. It has a sheaf of blue prints on which the new world is worked out to three decimal points, and on which its own position is as clearly defined as the details of one of its turbines.

The article stated:

The project began a year ago, after Mr. Wilson [president of the company] delivered a speech before the American Institute of Electrical Engineers, to whom he talked of "total security." Soon after that, the company's Planning Committee of fourteen was assigned the job of post-war planning. Vice President David C. Prince, in charge of the committee, began "a typically thorough and exhaustive study of the subject." He broke down an estimated post-war income of \$110,000,000,000. He figured that output for food, housing, etc., would rise from \$55,200,000,000 (in 1940) to \$64,000,000,000, consumers' durable goods would

rise from \$8,300,000,000 to \$13,000,000,000, etc. Getting down to particulars, he estimated that the electrical industry as a whole has a claim to \$3,894,000,000, of which GE's competitive playground will amount to \$2,887,000,000. If the company gets 25 per cent of this, as it has in the past, it will gross \$721,750,000. As Mr. Wilson says, banging his hamlike fist, GE is a billion-dollar company and is going to stay one. But this \$722,000,000 would take care of only 75 per cent of the people who will work for GE this year. What to do?

Here the problem falls in the lap of each department. The sales manager, the engineer, and the shop superintendent, who together are the Management Committee, are interviewed by the Planning Committee, which gives an estimate of the potential national volume of the business in which the department is engaged. Since each Management Committee knows how much of the total it is getting it knows instantly whether it is operating above or below its peace-time potential. If above, it makes plans for retrenching, or for filling the gap with new products. If below, it lays campaigns for a bigger future. Some of the committees have already reported. One figured it could get 15 per cent of a projected national business of \$225,000,000. Having facilities to produce only \$17,000,000 worth of goods, it is dreaming of terrific expansion. Another took the bull by the horns and announced that it would have to retrench if it got only its share, but could see developments rising out of war work on which it could expand. Still others, however, admitted that part of their personnel would have to be transferred. Some people obviously will have to find work outside GE.

THE project rests upon the assumption that the U. S. national income (at 1940 prices) would be \$110,000,000,000 after the war. Mr. Prince says that if people are willing to work long hours in the interest of national defense, they should be willing to work shorter hours and produce about as much in the interest of raising the standard of living when peace comes again.

He is well aware that such a statement

WHAT OTHERS THINK

oversimplifies the matter. He knows that if the capitalistic system is to survive, GE and other companies will have to do some optimistic plunging on the day peace is signed. Otherwise, not even GE's dis-

placed war workers can find jobs elsewhere. As Chester Lang, vice president in charge of GE's war projects committee, says, "We will have to put up or shut up."

The ODT Takes Over Transit Regulation

NCESSITIES of the war emergency show more plainly, with each passing day, that normal utility regulation is being eclipsed for the duration. The conventional system of regulation by state commissions is being overshadowed by a series of direct orders issued to the utilities from the Federal war organizations in Washington.

This eclipsing process began mildly enough, nibbling at the fringes of conventional regulation. The series of curtailment (or rationing) orders issued by the War Production Board for the conservation of the service and facilities of gas, electric, and telephone utilities were a fair sample. These dealt entirely with the utility service. But they did invade a normal function of the public service commissions and subordinated a traditional obligation of a public utility—the obligation to render service to all without discrimination.

In the field of transportation the wartime domination of Federal regulation is moving more rapidly. First of all, the WPB, through its system of priorities, indirectly affected the ability of many common carriers to meet the demands made upon them for service. Transit companies which ordered 100 busses are glad to get a fraction of that number delivered. Street car companies have just about given up hope of delivery in the near future on substantial orders for new traction equipment.

MORE recently the Office of Defense Transportation, under the leadership of its director, Joseph B. Eastman, flatly prohibited any transit company from making any further substitution of bus routes to replace existing rail trans-

portation. The obvious reason, of course, lies in the critical rubber tire situation. But it is significant that the order was issued directly to the transit carriers. The state regulatory commissions, which heretofore have passed on such matters as the adequacy of service and the desirability of substituting bus for rail service, were conspicuously by-passed.

Now the ODT is moving into the field of rate regulation. Transportation rate adjustments will be negotiated by the Office of Defense Transportation whenever it is necessary to expedite the free flow of traffic in the war effort. To prevent a misunderstanding of the position which the ODT has taken with respect to such adjustments, Director Eastman has issued the following statement:

The function of the division of rates of the Office of Defense Transportation is to see that rates are established via the various carriers which will expedite the free flow of commodities necessary to the war effort. Because war conditions have caused dislocations in normal traffic movements, it is, and will continue to be, necessary to negotiate certain rates for particular movements. In such instances it may at times be necessary to request reductions in existing rates.

Dr. G. Lloyd Wilson, director of the division of rates of the ODT, has requested rail carriers to consider adjustments in rates on crude sulphur shipped to eastern port cities. Crude sulphur formerly moved via coastwise steamship lines, but much of this traffic now moves by rail at much higher rates. Similarly, Dr. Wilson has requested that rates be adjusted downward on transcontinental movements of lumber as well as on movements of cement from northern producing points to South Atlantic and Gulf ports for export. In current negotiations with the carriers, the ODT has requested the carriers to refrain from increasing the transcontinental west-bound rates on iron and steel articles and to waive the increases recently authorized by the Interstate Commerce Commission on iron and steel scrap,

PUBLIC UTILITIES FORTNIGHTLY

since an increase in the rate on this essential war material might have the effect of reducing the available supply.

Dr. Wilson requested that increases on sulphur, lumber, and cement not be made pending the presentation of a formal request for adjustments in these rates. These specific proposals to adjust rates have been made by the ODT to the Joint Interterritorial Railroad Committee set up at the time of the hearings before the ICC on the railroads' proposal for a general increase in rates. As Dr. Wilson indicated at the recent meeting of the joint committee in New York city, it is hoped that these adjustments, and such additional adjustments as may be necessary in the future, can be brought about through negotiation with this and other carrier committees.

IT is obvious that the ODT is for the present restricting its rate-making "request" to the railroads and the other interstate carriers transporting essential war materials. Since this has long been a Federal function, the ODT merely invades the regulatory field heretofore exclusively preempted by the Interstate Commerce Commission.

But it is not too extravagant to suppose that isolated cases of local transit rate regulation may arise equally connected with the nation's war effort, which will require positive action of the ODT. Already the passenger transportation situation in cities such as Baltimore and Los Angeles, where tens of thousands of workers are engaged in the production of desperately needed war supplies, has reached the point where there is talk of rationing rides on street cars, transporting workers on flat cars, using belt lines of steam railroads for the establishment of new commutation service, and other drastic proposals which would have been scoffed at a mere year ago.

If, as, and when any of these developments come to pass, rate complications are bound to ensue. And if it is the sphere of the ODT to handle the service problem, it might well follow through and handle the entire problem, including that of rate regulation.

Furthermore, the intrusion of the Federal authorities for the relief of local transit operations during a war emergency would not be entirely new. During World War I a number of street car com-

panies were laboring under ironclad 5-cent fare franchises which threatened to overwhelm them in an era of rapidly rising prices. Relief from local authorities was either too slow or impractical. The situation became so acute that President Wilson was obliged to set up a Federal board to handle such cases.

The state regulatory commissions, by and large, realized the necessity for such direct Federal action. Their attitude is not one of resistance but of cooperation. They want to know how they can help bring about compliance with such necessary Federal orders. They feel, if anything, the Federal war agencies are overlooking a good bet when they fail to take full advantage of readily available instruments of cooperation for purposes of administering their orders from Washington.

SEVERAL weeks ago the National Association of Railroad and Utilities Commissioners, at its headquarters in Washington, D. C., established a war committee under the chairmanship of Walter R. McDonald, who is also chairman of the Georgia Public Service Commission. The purpose of this committee is to contact and cooperate with the Federal war agencies in matters affecting public utility regulation.

This war committee held a conference in Washington on March 28th with Leighton H. Peebles, chief of the WPB Communications Branch, and J. A. Krug, chief of the WPB Power Branch. These conferences may have laid the groundwork for closer cooperation between the Federal and state boards in the future.

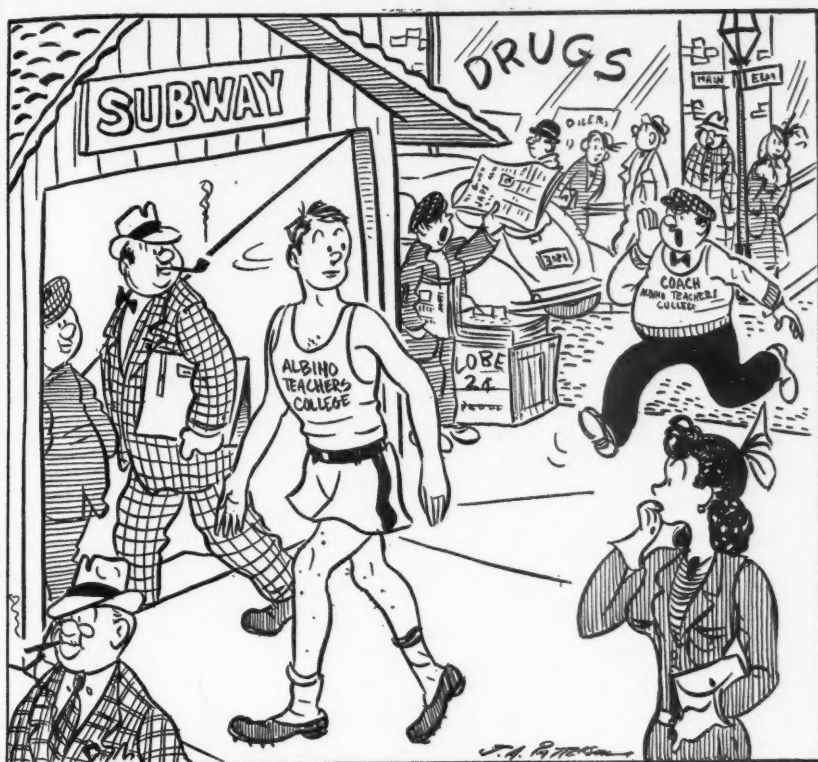
Individual state commissions have also gone into action on their own initiative with respect to utility operation under the war emergency. This was especially noted in the case of the California Railroad Commission, whose activities were outlined in **PUBLIC UTILITIES FORTNIGHTLY**, February 26, 1942, page 306.

The department of public service of the state of Washington has established a war efforts section in its division of utilities. This new section will operate



only
coor
lems
tran
A
exp
ther
time
com
ton
plan
sari
exce
so-c
tran
got
Ma
tran

WHAT OTHERS THINK



"HEY, FRESHMAN! YOU DON'T HAVE TO GET ON THE SUBWAY TO PLAY SQUASH!"

only for the duration and will be the coordinating center of all the war problems of the department relating to both transportation and utilities.

As time goes on, we may reasonably expect other state commissions to gear themselves more particularly to a war-time brand of utility regulation. Local communities also are showing Washington that all the original thinking and planning along this line need not necessarily come from Washington, D. C. An excellent example of this is seen in the so-called Pontiac plan for war worker transportation. This plan for solving the transit difficulties in Pontiac, Michigan, got off to a flying start on March 16th. Manufacturers, labor, merchants, local transit companies, and the Michigan

Highway Commission all coöperated.

THE plan probably was inspired by Irving T. Babcock, president of the Yellow Coach & Truck Company, who realized that revolutionary changes in workers' transportation would be necessary in view of the slowly vanishing automobile tire. Seventy-five per cent of Michigan's workers, the majority of which were single riders, formerly used personal automobiles to go to work. The need for an intense and systematic program of coöperation was apparent.

G. Donald Kennedy, Michigan state highway commissioner, was fired by Babcock's suggestion and assigned a corps of traffic experts to make a guinea pig out of the city of Pontiac, Michigan. The

PUBLIC UTILITIES FORTNIGHTLY

Pontiac plan has three main features: (1) to eliminate the single rider in private car usage; (2) to obtain a maximum use of the city bus system by staggered hours for work, school, and shopping; (3) to arrange for the pooling of worker transportation so as to take two out of three private passenger cars out of daily operation.

There are psychological and financial aspects of the plan. As to the latter the manufacturers of Pontiac are underwriting the major part of an estimated \$5,000 cost of the three months' trial. The psychological aspect is taken care of by application cards, windshield stickers, buttons, "Let's Ride Together" slogans, neighborhood meetings, and other educational features.

Over 100 per cent use of the available facilities of the local bus system (which cannot be expanded) is in prospect through the staggered hours. Plants in one end of town start their daily shifts on the hour. Plants in the other end start their morning shifts on the half-hour, making a full cross-town haul between six and 8:30 A.M. Schools dropped back to 9 and 9:15, while downtown stores and offices delay opening until 10. Unnecessary travel of all kinds is discouraged.

THE Pontiac plan, or the "Michigan plan," as the state highway commission would rather have it called, has made a hit even with the transit companies. The trade magazine of the field, *Transit Journal*, stated editorially:

For transit men to endorse some of these measures would have been rank heresy a short time ago. Operators of street cars and busses were making every effort to provide such frequent service that nobody would want to walk. They were vigorous in their condemnation of schemes involving the joint use of a private automobile by several persons, claiming that this made it virtually a common carrier without burdening it with the responsibilities which are imposed on such agencies.

War, however, changes many things. It

changes our ways of living and our viewpoints. To win the war we must all cooperate to get maximum results NOW. If some of the measures necessary to accomplish this run counter to our traditional ideas, we must modify the ideas. Even though these measures may present post-war problems, we must accept them during the emergency.

The seriousness of the local transportation problem in American cities is not yet generally recognized. Estimates have been made that a total of about 28,000,000,000 rides were taken last year in automobiles owned by city dwellers in the United States. Nobody knows exactly how many will be taken this year or next year. The conclusion is inescapable, however, that tire rationing, and perhaps gasoline rationing, will force the private automobile to play a steadily diminishing part in urban transportation for an indefinite period. If there is anyone who doubts it, let him say when he thinks rubber for tires will again be imported into this country in quantity from the Far East.

Of course, the need of transportation will certainly not decrease as more and more private automobiles go on the jacks. Pleasure driving can be given up. But the workers have to get on their jobs; children have to go to school; housewives have to go shopping; and some measure of recreation must be available.

FURTHERMORE, American cities with their magnificent distances, built up by liberal use of automobile transportation, are not geared to sudden confinement of living space like the more or less self-contained neighborhood living cultures of European cities. In Europe most of the people never had automobiles and never expected them. They arranged their business, living, and cultural habits accordingly.

But little by little the American public will learn to accommodate itself to the circumstances arising from the emergency. Bicycling, skating, and hiking will no longer be confined to the juveniles. And this may be a good thing for all of us. As Joseph Eastman recently pointed out the American public was in a fair way of losing the power of its legs.

WHAT OTHERS THINK

The Telephone Man Is Called to the Colors

It is an acknowledged fact that the draft and the demands of the armed services generally have been especially hard on the public utility industries. Of course, other industries also are feeling the effects of a diversion of their man power to active military service.

In the case of utilities this pressure has assumed a pincerlike pattern. On the one hand, the very existence of the war emergency has skyrocketed the demands for utility service to take care of the war activity. We need more electric power for aluminum, more gas for shipyards and factories, more telephone service generally. This naturally means expansion of utility facilities and more man hours for construction, maintenance, and operating crews.

But on the other hand, there are certain utility employees whose very training makes them highly prized and much desired for technical branches of the Army and Navy. U. S. Engineers want and have obtained many electrical engineers from the power industry. The Chemical Warfare Service has its eyes on expert gas production technicians.

Probably the most insistent demand on a branch of utility personnel has been that of the Signal Corps on telephone employees. It is insistent because it not only skims the top cream of technical personnel in the form of engineers, cadet engineers, and so forth. It follows all the way down the line to the humblest "grunt" who has acquired skill assisting in the erection of telephone poles and wire installation.

RECENTLY, the problem of the Signal Corps in filling up its ranks drove it directly into negotiation with the telephone industry. Hence a plan has been developed for the organization within the telephone industry of reserve units of the Signal Corps.

A recent article on this subject in the March 28th issue of *Telephony*, journal of the telephone industry, states in part:

The shortage of competent officers and

experienced communications technicians is especially acute in the Signal Corps. As one means of solving this personnel problem, the Signal Corps has called upon the independent telephone industry to form and sponsor affiliated Signal Corps units and the machinery for the organization and sponsorship of such units has been set up and is in full operation.

Because of their close contact with all independent operating telephone companies in their respective territories, state telephone associations have assumed the responsibility for forming and sponsoring the affiliated Signal Corps units for independent men only in their states and in neighboring states which have no associations.

In some cases large independent operating companies are organizing and sponsoring units made up of their own employees and of employees of neighboring small companies.

By having associations and individual companies sponsor such units, independent men having reasonable telephone knowledge and experience may be immediately commissioned or rated as technical sergeants or technicians at better rates of pay with more opportunities, and avoid the usual long delay in reaching these ranks as in the case of ordinary enlistment or the draft. It is understood technicians enter the service as privates at \$30 per month, but after four months of training they become technicians at \$60 per month. Linemen, repairmen, etc., having reasonable experience may qualify as technical sergeants and technicians.

EMployees of the Bell Telephone system, of course, are likewise being organized. Employees between the ages of twenty-one and forty-five are eligible to enlist in these sponsored Signal Corps units. Those expecting to be drafted and others who desire to enter military service are being sought for these units and it is understood that men who might otherwise be subject to the draft would be exempt from further requirements when they have enlisted in these reserve units. In this respect the telephone industry has the benefit of the services of these employees up until the very time the reserve unit is needed for training in the expanding Army.

Otherwise, a telephone employee might be called up much sooner for service in some other branch of the Army in which

PUBLIC UTILITIES FORTNIGHTLY

his skilled training might be wasted. The *Telephony* article mentioned the secondary Army branches which have special need for reserve units of trained telephone employees. The article continued:

... The units include Signal Repair, Signal Installation, Signal Depot, Signal Operation, and Signal Construction Companies and Signal Construction Battalions for duty with ground forces as well as Signal Aircraft Warning Plotting Companies, Signal Aircraft Warning Battalions and Regiments, Signal Air Depot Platoons, Signal Aviation Service Companies and Signal Depot Companies, for service with the air forces. They vary in size from a Signal Air Depot Platoon with one officer and five technicians, to a Signal Construction Company with five commissioned officers and ten technicians.

Independent men accepting commissions as reserve officers or as enlisted reservists in the above affiliated Signal Corps units will not be called into active service until the unit to which they are attached is activated. In many cases this will result in their company keeping their services longer than otherwise would be the case, since commissions or enlistment in a sponsored Signal Corps unit supersedes requirements of the draft.

However, independent telephone men cannot join the above Signal Corps units unless the units are sponsored by state associations or operating companies of sufficient size to furnish a complete unit. To assist the independent industry to form these units, the military personnel division of the Signal Corps has assigned Lieutenant Colonel William C. Henry, who is on duty as liaison officer for all independent companies in the Office of the Chief Signal Officer in Washington, D. C., to work with Executive Vice President Louis Pitcher of the United States Independent Telephone Association and with secretaries of state associations.

ALL this means, of course, that the Army is putting the touch on the telephone industry for its choice employees at a time when they can least be spared. But the telephone industry is trying to do the best it can with the minimum of requests for occupational deferments. This raises the question of what is an occupational deferment and when it will be allowed.

Major Harry J. Lemp, occupational adviser with the New York state headquarters of the Selective Service, recently attended a directors' meeting of the New York State Telephone Association

and gave an enlightening talk on the meaning and extent of occupational deferments. An analysis of this appeared in a bulletin of the New York State Telephone Association, issued by its executive secretary, A. R. MacKinnon.

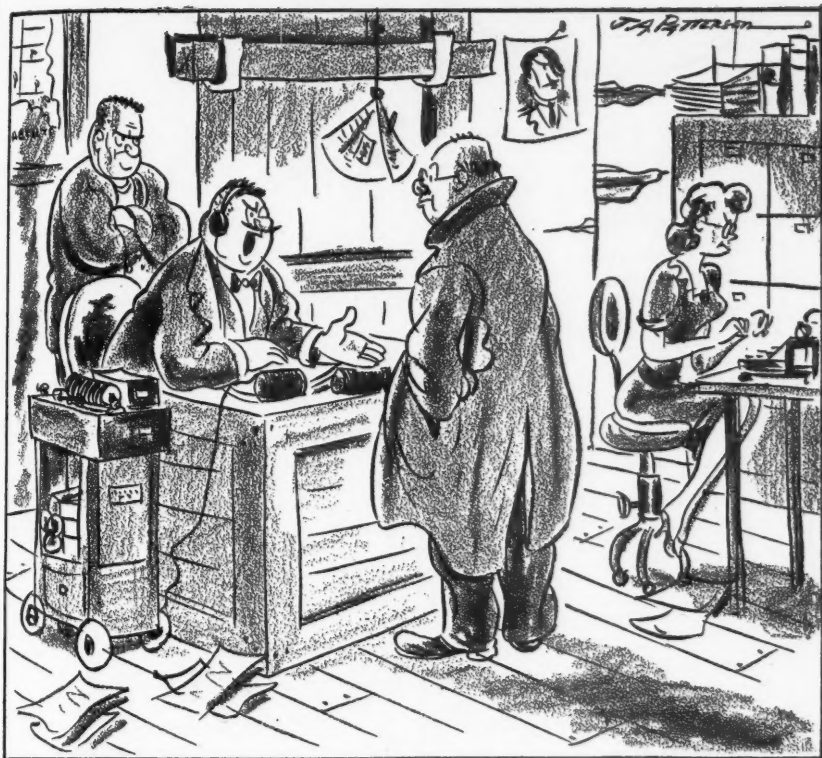
First of all, Mr. MacKinnon emphasized that there is nothing permanent about any industrial deferments. They are all limited to six months whether they are Class II-A or II-B. At the end of six months the question comes up again with respect to every man who has been deferred. Class II-A means a "man necessary in civilian activity." Key telephone men come under this classification. The deferment is given *in order to enable the telephone company management to train a replacement*. At the end of six months the deferment will not be renewed unless the management can show that everything possible has been done to find and train a replacement without success. A similar showing must be made for every additional extension of the deferment. Naturally, it becomes more difficult to make out a convincing case as time goes on.

Class II-B means a "man necessary to the war production program." A key telephone man might also come under this classification. This deferment is given for the same six months' period as Class II-A and under the same conditions, which require the employer to use the period of deferment for training a replacement.

COMMENTING on the position of the telephone industry with respect to the needs of the armed services for additional man power, Mr. MacKinnon stated in his bulletin:

When we look at the entire telephone picture from a war standpoint it looks like we have a big job ahead of us. We have fewer employees than we had before the last war and these employees average from ten to fifteen years' service. Most of them are old timers who will not be drafted unless the Army must have them. War today calls for Signal Corps men to take care of an Army of 7,000,000 instead of an Army of 2,000,000 we had during the last war. In addition modern war needs almost as many men in the Signal Corps as were in the last war for the purpose of taking care of the Inter-

WHAT OTHERS THINK



"NUMBER 48, THOSE TELEPHONE CONVERSATIONS YOU INTERCEPTED IN WASHINGTON SEEM TO DEAL MOSTLY WITH WHISKEY, WOMEN, AND OVERTIME"

ceptor Command in civilian defense. When we look at that big picture we wonder if there is a single telephone man whether subject to the draft or not who does not have some responsibility in this war effort, and who might not be used by the Army in some capacity. We older men may not be able to climb poles or stand the gaff of construction work, but if there is some job that they want us to do we should be ready to say, "Aye, aye, sir, I am ready."

In conclusion, Mr. MacKinnon gives five definite suggestions to officials of telephone companies to help them ease the shock of man-power diversion:

1. Check every military employee as to age, dependents (working wife), draft registration, and other information as to whether he is likely to be called.

2. Prepare a statement about each man showing education, experience, and training.

3. Arrange to have the employee notify his employer when he receives a questionnaire from the draft board so that the management has sufficient time to determine whether or not a request for occupational deferment should be made. This not only simplifies the work of the draft board but might also mean the difference between the request being honored or rejected. Unless requests for deferment are made prior to the time the registrant is called for preinduction physical examination, it will not be honored.

4. Look around for available men not

PUBLIC UTILITIES FORTNIGHTLY

eligible for draft because of age, deferment, or other reason (such as a minor physical handicap) which would not hinder efficient service as a temporary telephone employee. Such employment should be made with the understanding that it is temporary because of the responsibility which the law places upon the company to give the soldier back his job when he returns from service.

5. Management should pool the information on its own employees with a district organization of company managers that would function as a clearing house for the training, placing, or exchange of necessary employees during the emergency.

RECOMMENDATIONS of the Defense Communications Board, which took steps to advise Selective Service authorities on the necessity of procuring draft deferments of experienced technical communications employees in essential cases, have met with favorable response, according to *Broadcasting* magazine, a journal of the radio industry. The *Broad-*

casting article (issue of February 23, 1942) stated:

A general recommendation has been sent to all local boards requesting "utmost" consideration in all cases involving technical employees. . . . However, it was stated, the recommendation is not to be considered a blanket rule for deferment of radio technical employees. Every case must be considered by the local boards in the light of circumstances surrounding a request for deferment and in view of the Selective Service recommendation.

Action of the DCB was taken following a meeting February 12th at which reports of the domestic committee and of the industry and labor advisory committees relating to technician shortage were considered.

Selective Service officials, it is understood, were advised that deferment of communications operators should be allowed in individual cases with reasonable time for obtaining replacements. The importance of radio broadcasting as an essential war operation was cited. The DCB, however, made no recommendation for over-all or permanent deferments.

—F. X. W.

Are Assurances from the Government for Continuation of the Profit System in Order?

THE soaring national debt is forecasting a continuing transition from a *laissez-faire* economy to a government-regulated and controlled economy, according to "Everybody's Billions," an article by Oscar Lasdon in the April issue of *The Bankers Magazine*. "The debt," writes Mr. Lasdon, "is helping to accomplish indirectly what we are refusing to do directly."

Mr. Lasdon, who is associate editor of *The Bankers Magazine*, notes that there is little question that we can bear the \$150,000,000,000 debt necessary to win the war. But after the conflict is over, he warns, the spenders will still be in the saddle and further heavy public spending may be expected as part of the post-war adjustment program.

Dangers of financial bankruptcy and
APR. 23, 1942

of inflation of the type that plunged Germany into chaos after World War I are not likely, the article points out. But the writer states that freedom from chaotic inflation and financial collapse does not mean that we will remain unaffected by the tremendous growth in our debt. He continues:

If the increase in public debt goes far enough, and unless it is accompanied by some sustained rise in the national income, it seems destined to be an important factor influencing our economy. Together with other "reform" measures, it may transform our private, capitalistic economy into a more socialized order. . . .

Big deficits and big debts spell a permanent transition in the position of government in our economy, and an enlargement in the duties of government, as we know them now. Federal regulation will extend its hand over many activities now untouched and we may

WHAT OTHERS THINK

witness a wide change in the American economy.

After the war, we will probably find that a powerful segment of the New Deal is firmly committed to the policy of "full recovery" at any cost. If traditional business and financial arrangements stand in the way, if legal obstacles exist, or if government functions need fundamental revision, then these dispositions are to be firmly corrected. There will be an attempt to subordinate everything to this objective—no matter what the price. In this light, it is much easier to understand

the prevailing indifference, in some quarters, to ceaseless borrowing and spending.

SOME possible consequences of the rising debt, according to Mr. Lasdon, include a redistribution of wealth and income, socialization of credit, impairment of state and local governmental autonomy, and further encroachment by the Federal government on functions now regarded as purely private.

Accidents Retard the War Effort

"**T**HESE are hectic times and everyone is going 'full speed ahead.' The service we provide is of vital importance to the war production effort. Under such circumstances we may let something slip. I pray it will not be safety and accident prevention that slip. Safety is modest and retiring. It does not hammer at your office door every morning demanding that it be heard—as do some of your other duties. But it speaks, nevertheless, and if its voice is drowned out because of the clamor of other important matters, sooner or later it confronts those, who are heedless to it, with the reproachful language of blood and pain and heartache.

"But someone may say, 'This is too sentimental. I am a hard-headed business man. I am interested only in production, efficiency, and profits.'

"Very well! When a serious accident occurs work is interrupted, time is lost, often material and equipment are damaged—just the things the manager, striving for efficiency, doesn't want to have happen. **THE ACCIDENT**—there is the symptom that something may be wrong, possibly an unbalance of emphases in the department.

"To some businessmen it's a great surprise to learn that the promotion of safety promotes efficiency. Why shouldn't it? The same careful attention to the training and placing of men, the same attention to the selection, maintenance, and use of equipment, that safety requires, makes for better and more efficient operation. Safety needs more attention by the head of the department than an occasional approving 'pat on the back.' It requires the same active continuing interest as do other phases of management. Let's not pass it up as a frill or fancy that can be laid aside until we are not so busy."

—B. A. THORNTON,
Chairman, Publicity Committee, National Safety Council.



The March of Events

Electrical Devices Barred

IN a dozen drastic orders, all testifying to deepening raw material shortages, the War Production Board on March 30th slashed at the use of metals in hundreds of civilian and household commodities.

In the most sweeping of the regulations, the WPB forbade the manufacture after May 31st of almost every household electrical device. The only exceptions of major importance were vacuum cleaners, fans, heating pads, and record-players, most of which have been or will be curtailed under other orders.

The electrical appliance order permits the 200-odd manufacturers affected to continue production between the date of the order and May 21st at one and one-half times the normal rate, but forbids the use of pig tin, alloy, steel, copper, copper alloy, and aluminum, as well as nickel for nickel plating. Included in the scope of the order are all home and commercial appliances using electrical heating elements or powered by electrical motors of fractional horsepower.

Another large group of consumer goods was put under price ceilings on April 3rd when the Office of Price Administration "froze" the retail, wholesale, and manufacturer prices of 44 electrical household appliances. Production of these products will stop May 31st under an order issued by the War Production Board, but "rationing of these articles is not now contemplated," Acting Price Administrator Hamm explained.

The "quick freeze" order, which became effective April 7th, prohibited retailers and their suppliers from selling the articles at prices higher than those in effect on March 30th. The price-control action was necessary, it was said, to prevent runaway prices which might develop as a result of the WPB's order.

Power Purchasing Plan

SENATOR Homer T. Bone, Democrat of Washington, on April 1st introduced in the Senate legislation which would place the Bonneville Power Administration on a "straight-out, cold-blooded business basis" and change its method of operation "without going to the Treasury for one penny."

The measure, which was introduced jointly with Senator Mon C. Wallgren, Democrat of Washington, would authorize the Bonneville Administrator to acquire by purchase or

condemnation, private power systems in Washington and Oregon, Bone said. These systems could then be resold to "public bodies."

The transactions would be financed by the sale of "revenue bonds"—bonds to be repaid out of operating returns. "The Bonneville Administration would be directed to break up the private power systems it acquires and sell them to public bodies," Bone said. Administration would remain in the Interior Department with the administrator to be appointed by the President and confirmed by the Senate.

Officers of the Washington State Grange and other organizations favoring public ownership of power subsequently issued a joint statement endorsing the Bone bill. The statement was signed by Henry P. Carstensen, master of the grange; Fred J. Chamberlain, member of the grange's executive committee; Henry W. Pierson, president of the Washington Public Utility District Commissioners' Association; and Oliver F. Hartline, president of the Puget Sound Utility District Commissioners' Association. It said in part:

"Already the Northwest has developed vital defense industries utilizing Bonneville-Grand Coulee power. Under present plans, about a third of the nation's supply of aluminum will be produced here. With more power, the entire war effort in the region can be extended. In order to make the needed power available, existing electric generation and transmission facilities must be unified under a single management for the entire region..."

To Direct Seaway Fight

CONGRESSMEN who are opposed to the St. Lawrence seaway have organized a strategy committee to direct their fight, it was reported recently. The committee includes William P. Cole, Maryland, Democrat, chairman; S. Otis Bland, Virginia, Democrat; Alfred F. Beiter, New York, Democrat; James E. Van Zandt, Pennsylvania, Republican; and Walter C. Ploese, Missouri, Republican.

Under this group various state delegates will serve as "whips" in the fight against the project. Chosen from Pennsylvania were James A. Wright, Democrat, Carnegie, and Harve Tibbott, Republican, Ebensburg.

Two members have been chosen from each state, sometimes Republicans, sometimes Democrats, indicating the movement generally is more nonpartisan than partisan.

THE MARCH OF EVENTS

Refrigerator Ban Removed

THE War Production Board on March 27th "unfroze" stocks of domestic electric refrigerators held by dealers and permitted their unrestricted retail sale. The action permitted dealers to dispose of the entire stock they had on hand as of February 14th, when the government froze all such inventories.

Under the original WPB order, a dealer was allowed to sell up to 100 new refrigerators or one-twelfth of the number he sold in 1941, with sales dating from the freezing order.

Restrictions still apply to gas and kerosene refrigerators because of shortages of such equipment, WPB said, but dealers would be permitted to sell them back to distributors or manufacturers.

The order made available refrigerators to persons who placed orders before the freeze order was issued but who have been unable to receive deliveries. The existing orders in the hands of the dealers would get first call on the released refrigerators.

Raver Urges More Protection

PAUL Raver, administrator of the Bonneville Power Administration, last month testified before the House Appropriations Committee during hearings on the Interior Department 1943 appropriation bill that the maximum contribution the Northwest could make toward national defense was the establishment of industries utilizing power and mineral resources of the region.

The Bonneville chief warned that destruction of the great dams on the Columbia river by aerial bombing would be a national disaster and added that the United States will not win the war if it is unable to protect these vital power plants.

Raver said that whatever appropriations were granted the Bonneville Administration by Congress would be used to speed construction of transportation lines to carry power from Bonneville and Grand Coulee to war industries. Raver said the second line to carry power from Grand Coulee to Bonneville was now under construction and that one and possibly two more transmission lines from Grand Coulee to Spokane would be needed to furnish power to war industries at Spokane.

FPC Reviews Electric Bills

THE trend of average residential bills for electric current in cities of 50,000 inhabitants or more has been steadily downward since 1924, according to a report made public on March 29th by the Federal Power Commission, but the rate of decrease was less in 1941 than in preceding years.

Reductions in one or more typical bills were made by 26 of the 156 utilities in 37 cities in 1941. Increases were made in 5 cities, but in 3 of them there were decreases also. In two of

the cities, New York and Waco, Texas, the advances were caused by the operation of tax and fuel clauses in rate schedules.

Lowest and highest typical bills reported showed differences in charges for identical quantities of electric energy of from 153.8 per cent to 257.6 per cent. The report showed that there has been no change in lowest and highest typical bills among the major cities since January 1, 1941, and consequently no change in percentage differences.

Forbids REA Copper

WAR Production Chief Donald M. Nelson last month forbade further allocations of copper to the Rural Electrification Administration, thus ending all new construction of that agency for the duration of the war.

Nelson's action, taken with the approval of the War Production Board in an order to conserve the vital military metal, had the effect of shaving 3,200 tons of copper from the supplies which the REA had expected even after its operations were originally curtailed last fall by the former Supply Priorities and Allocations Board.

At that time, it was agreed to give REA 1,500 tons of copper a month, up to a total of 10,500 tons, to enable it to finish those rural electrification projects which were already 40 per cent completed. Since then, REA had received about 7,200 tons. This amount, it was believed, would be enough to enable completion of projects which were 40 per cent or more finished by December 5th, but would not permit any further work on other projects under way, or the initiation of any new construction.

In the future, it was indicated, REA would be in the same category as any private utility, able to build a new power line only if the specific construction is authorized by the WPB as a war production necessity.

It was reported that REA made no objection to Nelson's decision. Although the agency had urged to be allowed to continue operations, it indicated it would abide by any WPB determination without question.

No Additional Daylight Saving

THE War Production Board has no intention of asking that all the clocks in the nation be set up another hour during the summer months, J. A. Krug, chief of the power branch, said recently.

He explained that advancing timepieces a second hour during the summer months would yield only a fraction of the substantial power savings gained through establishment of daylight saving by presidential proclamation in February. He said certain states might take such action on a statewide basis apart from the national situation and that New York might be one of them. Nation-wide action, however, he said, was remote unless power shortages become more critical than now anticipated.

PUBLIC UTILITIES FORTNIGHTLY

The 2-hour time-saving plan was proposed last January when Great Britain indicated it would adopt it to increase arms production.

Interior Funds Slashed

FUNDS to pay the \$8,000 salary of H. S. Raushenbush, research and planning chief of the Interior Department's power division, were stricken from the department's appropriation bill in the House last month after he had been charged with radicalism.

Also deleted were \$28,520 for the National Power Policy Committee, \$100,000 for the information division, and \$34,000 for the investigation division.

The amendment to slash the appropriation was offered by Representative Jones, Republican of Ohio, and adopted tentatively, 84 to 52. It was subject to final vote later.

Representative Winter, Republican of Kansas, had charged that Raushenbush "believes in communizing America and is doing his subtle best to achieve that end."

Alabama

Bond Plan Adopted

WITH a slogan "Buy Bonds to Bomb the Japs," the Birmingham Electric Company on April 2nd launched a U. S. War Bond buying campaign which will be dramatized on a world map across which American bombers will fly to bomb Tokyo.

The entire company has been divided into teams and each team is represented on the map by a bomber. Competitive ratios for the purchase of bonds have been assigned to each group based on number of employees and average earnings of employees in each team. Each bond purchased will send the group's bomber farther on its flight to Japan. The contest map will be changed semimonthly to show the progress of the U. S. bombers.

The campaign was launched under the leadership of H. E. Cox, vice president of Birmingham Electric. It was set up along lines suggested by the U. S. Treasury Department for large business groups, with certain allotments designated by employees each pay day to be deducted from earnings for purchase of war bonds.

FPC Authority Upheld

UPHOLDING the authority of the Federal Power Commission over the accounting system of the Alabama Power Company, the United States Court of Appeals declared on March 30th that "after all, the commission has many duties to perform . . . other than coaxing a reluctant licensee to act as the law requires that it shall act."

In a sharply worded opinion written by Associate Justice Justin Miller, the court declined to set aside an order of the FPC involving a determination of the cost of a hydroelectric project completed by the company on the Coosa river in 1930.

The company placed the cost at \$10,646,056. The commission set the cost at \$7,094,913 and ordered the company to revise its accounts accordingly. Subsequently, after a rehearing was ordered by the court of appeals, the commission raised its cost figure to \$7,209,363. The case then was returned to the court on several questions, including the extent of the commission's jurisdiction over the company's accounts.

Arkansas

Housing Rate Increased

A RATE of 2.11 cents per kilowatt hour for energy used by United States Housing Authority projects will be charged by the Arkansas Power & Light Company, the state utilities commission ordered on March 30th.

The company had proposed a schedule under which the rate would have been approximately 2.45 cents. The commission had directed the AP&L to charge a flat rate of 2 cents per kilowatt hour, January 27, 1941.

A rehearing was requested on February 5, 1941. A series of continuances followed, with no agreement being reached. Last month the AP&L asked the commission to approve the different and "some higher" schedule.

The order for 2.11 cents per kilowatt hour followed a hearing at which a USHA representative opposed the power company's choice.

Tie-up to Aid Service

REPRESENTATIVES of seven municipal power plants, a private utility, and the Rural Electrification Administration agreed recently to seek information of an interconnected power pool that would insure Arkansas cities an uninterrupted flow of electricity for duration of the war.

The pool, outlined at a meeting called by Mayor Neely of Little Rock, calls not only for exchange of power in case of damage to one participating system but for cooperative ar-

THE MARCH OF EVENTS

rangements for the transfer of equipment and personnel to meet emergencies.

A representative of each municipality and the private utility were appointed to put the plan into effect. Feeder lines from each municipal plant would be extended to the state network of the Arkansas Power & Light Company, REA systems, or other private systems which would permit transmission of pool current.

Feeder lines from the local plants to the intercity "high lines" could be erected at small cost, and existing facilities used as much as possible, Mayor Neely said. Officials of each participating plant would estimate the cost of constructing their own feeder lines, transformers, and other power transmission equipment.

Among the points to be given further study were:

1. Available power-generating equipment and ways of increasing its usefulness by additional interconnections.

2. Inventories of essential spare parts and equipment, especially materials interchangeable from plant to plant.

3. Plans for quick servicing in case of power interruption and feasibility of central or regional dispatching for trouble-shooting crews.

4. Possibility of establishing a state council of all power-producing agencies to coordinate means for securing maximum service to meet war requirements.

C. Hamilton Moses, AP&L president, said the pool could be connected with the new southwestern power pool.

California

Transportation Problem Discussed

PROBLEMS of transportation in connection with the war effort were discussed at length last month at a meeting of the transportation subcommittee of the state council of defense at San Francisco.

Staggering working hours for war industries under a broad plan covering entire regional areas was recommended by the subcommittee. Any system adopted, the committee advised, should apply to war industry in the entire San Francisco, Los Angeles, and San Diego areas and should not vary between one community and another within the general territories.

Street car rides, State Railroad Commissioner Ray L. Riley predicted at the meeting, may be rationed when tires are gone. Riley said new housing facilities would eventually have to be built near California's war industries to help solve the problem of transporting defense workers.

State commission representatives estimated that 87 per cent of the private automobiles transporting defense workers in San Francisco,

Los Angeles, and San Diego areas would be out of service within a year because of tire restrictions.

As a solution to current shortages of "key" men in the railroad lines, deferment of Army service for transportation workers was suggested. Harry See, railroad union representative, said Brigadier General Joseph O. Donovan, state selective chief, had asked the industry for a "standard of deferment" for railroad workers.

Uniform practices for railroad operations during air-raid alarm periods were recommended by the subcommittee. C. K. Bowen, assistant to the president of the Pacific Electric Railway Company of Los Angeles, was asked to draw up a suitable resolution.

Immediate extension of rail facilities to provide direct transportation to the key defense plants in the Los Angeles area was proposed on April 2nd by officials of the state commission. Preliminary studies for the formulation of such a plan were submitted by Warren K. Brown, the commission's director of transportation, to Commissioner Riley, who is in charge of the general survey of the transportation problem.

District of Columbia

Sliding-scale Rates Imperiled

HEARINGS were expected to be called by the District of Columbia Public Utilities Commission to consider advisability of abandoning the Washington plan, or sliding-scale system of determining rates used by the Potomac Electric Power Company, it was learned recently.

The Potomac Electric Power Company, principal operating subsidiary of the Wash-

ington Railway & Electric Company, has operated under the so-called Washington plan with respect to electric rates in the District since January 1, 1925. Under the plan, electric rates are fixed each year under a consent decree by order of the commission, and it is provided that if rates yield an amount for return on the rate base in excess of 6 per cent in the 12-month period under consideration, rates shall be adjusted to reduce gross electric revenues for the following twelve months by

PUBLIC UTILITIES FORTNIGHTLY

amounts equivalent to varying percentages of such excess amount.

There has recently been a change in membership of the District commission, so that a new attitude on the plan has been expressed to the company. It was feared the sliding-scale

arrangement may be permanently dropped. When hearings are held, the commission, it was said, would consider not only the plan itself but also the company's previous operating practices to determine whether utility consumers are receiving economic benefits.

Florida

Oil Shortage Affects Power

DISPLAY signs and some street lights may be blacked out in the Miami area to conserve electricity. McGregor Smith, president of the Florida Power & Light Company, wrote the Miami city government recently that a shortage of fuel oil threatened the normal

electric supply of the city. He said part of the oil that normally would have been used in Miami had been transferred to the big Dania plant of the company.

Utility companies in Florida, where there is no natural gas and no water power, use one-fifth of all the fuel oil consumed in the nation in producing electric energy.

Illinois

Transit Unification Plan

THE state commerce commission last month returned the proposed unification and reorganization plan for Chicago traction lines to Federal District Court Judge Michael L. Igoe with a statement that it had found the

plan to be in the public interest but reserving judgment on its merits to a later date. This action permitted the court to order a vote of security holders on the plan but left it within the power of the commission to reënter the case when and if the proposed new company is formed.

Indiana

Gas Jurisdiction Waived

Two members of the state public service commission on March 31st disclaimed jurisdiction over the proposed purchase of the mains of the old Indianapolis Gas Company by the city, at a short hearing. In written statements which they placed in the record of the hearing, George M. Barnard and William A. Stuckey, commission members, expressed the opinions that the commission has no jurisdiction over the sale.

Formal order of the commission on the decision would be written later. The action left the final decision on the purchase of the property to the city council, which April 6th authorized directors of the utilities district to proceed with plans to buy the utility property of the Indianapolis Gas Company. The directors on April 7th authorized the issuance of \$6,000,000 in revenue bonds to take over

the utility property of Indianapolis Gas.

Attorneys for the old Indianapolis Gas Company have contended that the commission does have jurisdiction, taking the position that under the original Public Utility Law, it is provided that the property and plants of a utility cannot be sold to any "other person, partnership, or corporation," without the approval of the state commission.

Barnard said in his statement that it appears "beyond any question" that the power of the city to buy the equipment is provided in a 1939 act which gives a municipality the right to acquire property of a public utility by act of the city council and a resolution by the trustees of the utility.

Patrick J. Smith, attorney for the utilities district, said the sale date would be April 23rd, or a few days thereafter and said the directors planned to consummate the sale and take over the property about May 1st.

Iowa

Line Extension OK'd

THE Iowa Commerce Commission last month approved a franchise for a 30-mile
APR. 23, 1942

extension by the Iowa Electric Light & Power Company, Cedar Rapids, of its 115,000-volt line from the west line of Benton county across Tama county and into Marshalltown.

THE MARCH OF EVENTS

The line, mounted on poles ranging from 50 to 75 feet high, and consisting of wire spans ranging from 400 to 1,300 feet, was identified as the most powerful electric transmission line in the state.

Commerce commission engineers estimate its cost at \$5,000 a mile, or \$150,000 for the extension.

The first section of the line, running from the company's power plant in Cedar Rapids (Linn county) to the west line of Benton county, was installed last year.

The commission also reported it had approved the first half of a new 44,000-volt line that eventually will link the Iowa Southern Utilities Company, Creston, Iowa, power plant with the Des Moines plant of the Iowa Power & Light Company.

The Iowa Southern Utilities' half of the line has been approved. The Des Moines company's

application on the northern half of the line was still pending.

Power Project Dropped

THE Federal Power Commission recently dismissed an application by Curtis Power & Light Company, Keokuk, for authority to build a hydroelectric power project on the Des Moines river near Hinsdale.

The application, the commission said, anticipated that the output of the 10,400-horsepower capacity project would be sold to municipalities, rural coöperatives, and utility companies.

In its dismissal order, the commission declared that Robert W. Curtis, principal sponsor of the project, was deceased and that correspondence with other interested parties "has failed to secure information necessary to complete the application."

Louisiana

Power Supply Adequate

GOVERNOR Sam Jones said recently that Louisiana had a more adequate supply of power for defense industries than most states and considerable additional war plants could be expected to be located within the state for that reason.

The governor said that a recent report that

Louisiana faced a power shortage was true but that the report forecast a power shortage for the nation as a whole, based on the rate of additional demands coming from new war industries.

He said, however, that there still was an adequate supply in Louisiana and that the government had under consideration plans for a number of additional industries for the state.

Massachusetts

Interconnection Approved

THE Federal Power Commission recently authorized construction of a permanent interconnection near Somerset between the facilities of New Bedford Gas & Edison Light Company and those of the Montaup Electric Company. The order stated the connection of at least 25,000 kilovolt-amperes capacity would

provide for the interchange of electricity between the two companies to assure an adequate and continuous power supply for war industries in the territories they supply in southeastern Massachusetts, and that it is in the public interest "particularly in view of present war conditions and the importance of war industries served by New Bedford and Montaup."

Michigan

Rival Unions End Dispute

THE sporadic threat of rival unions to tie up the Detroit street railway transportation system by strikes was alleviated on March 31st when the unions ratified a peace agreement proposed by the National War Labor Board.

The plan was ratified for the duration of the war emergency and gave the unions separate spheres of influence.

Under the pact, the Street Car Men's Union, Division 26 of the Amalgamated Association of Street, Electric Railway, and Motor Coach Employees of America, AFL affiliate, will represent the operating division, as it does at present.

Division 1,109 of the Amalgamated will surrender its contractual right to represent maintenance employees to Local 312 of the State, County, and Municipal Workers, Committee of Industrial Organizations affiliate.

New York

Sees Need of Seaway Power

ASSEMBLYMAN Frank J. Caffery, Democrat of Buffalo, recently announced receipt of letters from Donald M. Nelson, chairman of the War Production Board, and a representative of Prime Minister W. L. Mackenzie King of Canada urging the start of construction on the power part of the St. Lawrence seaway project as an essential war need.

Assemblyman Caffery, a leader of the legislative group opposing the development of the St. Lawrence seaway and power project, had sent letters to Mr. Nelson and the Canadian Prime Minister requesting their views on the subject.

Mr. Nelson's reply read in part as follows: "This is in reply to your letter inquiring about the worth of the St. Lawrence project. In regard to that project, I am accepting and following the advice of Mr. William L. Batt, director of the materials division of the War Production Board, and Mr. J. A. Krug, chief of the power branch of the materials division.

"It is their opinion that at least the power part of the project should be authorized and constructed with all possible speed. The project will require about four years for construction and when finished will provide a large and highly efficient source of electric power.

"It appears that it will be possible to organize the construction program in such a way that during the first two years a minimum of critical materials would be required. Thus, most of the requirements for steel plate and all of the requirements for hydroelectric machinery would not come until 1944."

The Canadian approval of the project was contained in a letter from N. A. Robertson, Under Secretary of State for External Affairs. He stated he was replying for the Prime Minister.

Signs Fare Bill

Governor Lehman on March 28th signed without comment the Muzzicato bill designed to prevent an increase in the 5-cent subway fare in New York city. At the same time he vetoed, as unnecessary in view of this action, the Crews bill covering the same subject.

The governor, it was said, had been visited earlier by a delegation from the left wing of the American labor party, asking him to approve the Muzzicato measure. That bill does not bar a fare increase, but it permits a referendum to be ordered by the city council if the board of estimate votes to increase the fare. The council would suspend any fare increase while the referendum was being held.

The bill contains a provision that such a referendum must be held at a special election or at a general election held in an odd-numbered year.

Senator Muzzicato amended his measure to contain all of the features of the Crews bill and one additional feature. This was the right of the city to make up transit deficits, implied in the city's general powers.

Finance Bills Passed

ACTING on an emergency message from Governor Lehman, both houses of the state legislature enacted legislation on March 31st to carry out the revision of New York city's finances, involving the transfer of relief revenues and expenditures from the emergency category to the city's regular budget.

Governor Lehman signed the measures a few hours later so that the way was cleared for Mayor LaGuardia's budget message to the city council on April 1st, the last day for submitting the budget.

The vote in the assembly was 130 to 7, and in the senate it was unanimous. Thus after eight years in which relief and the taxes levied to support it have been treated as an emergency, the problem is ended, the city receives the taxing power to handle it, and it becomes a regular city charge.

One of the new laws is statewide in effect. It permits all cities in the state to enact a one per cent utility tax on gross receipts of public utilities and place the receipts in the general fund. This utility tax was first developed by New York city, later taken over by the state, and then the cities in the state were allowed to add one per cent for relief if they chose. The transfer of this tax to general fund purposes will aid Buffalo and Syracuse in particular and will help other cities to finance emergency war expenditures.

The second law affected New York city only. It continued for two more years and at the present level all the taxes New York city now levies for relief. These include the one per cent city sales tax, netting \$24,000,000 a year; the one per cent tax on utility consumption, netting \$3,000,000 a year; the utility conduit tax, netting \$500,000. To this can be added \$7,000,000 from the one per cent utility receipts tax and \$6,000,000 from the business turnover tax, diverted to the general fund last year.

Submetering Bill Too Drastic

OPPOSITION in its present form to the Johnson-Mitchell bill proposing the regulation of electric submetering under the supervision of the state public service commission was expressed recently in a statement by Arthur C. Bang, chairman of the public utilities committee of the Real Estate Board of New York. Recalling that for years the board has advocated submetering control in some form, Mr. Bang said his group deplored proposals which

THE MARCH OF EVENTS

would impose unnecessary expense, hardship, and "overregulation bound up in red tape."

The statement declared that regulation should be sufficient to assure protection of consumers' interests and should therefore establish controls only over such matters as rates, deposits, interest to be paid on deposits, and the testing of meters and equipment. It pointed out that the recent report of the commission to the state legislature demanding regulation of submetering met with the endorsement of the

real estate board in principle, but that the realty interests deplored "snooping" into all phases of building owners' records, whether they had anything to do with submetering or not.

The realty group said it opposed the bill for submetering in its present form as too drastic in some of its provisions. It declared that the production of books, contracts, records, etc., should be restricted to those having to do solely with the sale and resale of electric current.

North Carolina

Gas Service Discontinued

THE state utilities commission recently issued an order authorizing the Henderson & Oxford Gas Company to discontinue gas service in Henderson on April 15th and to dismantle its plant.

The order was granted after the gas company had shown at a hearing that "it is a losing proposition with no hope of getting on a paying basis and that it is without funds or any prospect of getting funds to keep its plant going."

The gas company, the order said, had offered

to sell its plant to the city of Henderson at junk value—\$10,000—but the city turned down the proposition.

Death Changes Commission Membership

ROBERT Grady Johnson, attorney and former speaker of the North Carolina house, was recently appointed to the state utilities commission to succeed the late Dr. Harry Tucker, who was appointed to the commission on April 1, 1941. Dr. Tucker died March 11th.

Ohio

Natural Gas Order

THE Federal Power Commission on March 30th directed the Ohio Fuel Gas Company to show cause by April 20th why the commission should not determine that an agreement of that company with Anchor Hocking Glass Cor-

poration, providing, in part, for the transportation by Ohio Fuel of natural gas from Gravel Bank, Ohio, to Anchor Hocking's plants in Fairfield county, Ohio, is not unjust, unreasonable, or unduly discriminatory, and why the rate should not be made the subject of an investigation by the commission.

Pennsylvania

Utility Wins Rate Case

THE United States Supreme Court on April 6th refused to hear the appeal of the Federal Power Commission from the decision of the Federal Circuit Court of Appeals sitting at Philadelphia in the Safe Harbor Power Corporation rate case. By its action, the Supreme Court in effect sustained the decision of the lower court which had held that the Federal Power Commission lacked power to fix interstate wholesale rates on electric power.

The dispute arose when the commission ordered a \$350,000 annual reduction in the wholesale rates of the Safe Harbor Power Corporation, which operates a hydroelectric plant near Lancaster, Pennsylvania. The Safe Harbor Company, owned by the Pennsylvania Water

& Power Company and the Consolidated Gas, Electric Light & Power Company, sells its power at wholesale to the Baltimore utility.

A victory for the producing company, the Supreme Court decision was regarded as involving not only the question of a reduction of rates to consumers of electricity in Baltimore, but also the scope of the Federal Power Commission's authority over hydroelectric developments throughout the country.

The FPC, in appealing from the circuit court decision, contended it had power to fix wholesale interstate rates in the absence of any finding that commissions of various states were unable to agree on rates. The commission told the court the case was "both novel and important, in that it is the first case involving the authority of the Federal Power Commis-

PUBLIC UTILITIES FORTNIGHTLY

sion to fix interstate wholesale electric rates for licensed water power projects under part one of the Federal Power Act."

The prolonged Safe Harbor Case began with hearings before the Federal Power Commission in September, 1939.

Refund Reply Filed

THE Peoples Natural Gas Company on April 8th filed in Harrisburg exceptions

to the state utility commission's recent ruling ordering the utility to make refunds to 150,000 customers in 13 western Pennsylvania counties for 1940 and 1941. Filing of the exceptions automatically prevented the commission's order from becoming effective until after the commission passes on the exceptions and issues a final order.

The commission last month had ordered refunds amounting to \$1,900,000 for 1940, in the case pending since 1937.

Rhode Island

Seeks Higher Gas Rate

THE Providence Gas Company intends to apply for an increase in gas rates when soft coal costs are known, F. C. Freeman, president, informed the stockholders on March 31st in a letter. His statement stressed that "all expense items have been increasing in cost," and added that the higher rates would be sought "to offset expense increases."

Principal increases, the statement pointed out, are in labor and coal costs and in Federal taxes. Nub of the problem, Mr. Freeman indi-

cated, is the cost of soft coal. Conditions in the market today are very upset, he said, "due to extremely uncertain transportation and mining conditions."

His statement also said that "the last labor increase was given in September, 1941, and on this item the first eight months in 1942 will exceed those of 1941. Consideration is being given to a recently requested additional labor increase." Because the increased labor costs total \$75,000 a year, Mr. Freeman said, this item will result in a \$50,000 increased cost for the first eight months of this year.

South Carolina

Sale Contract Signed

A CONTRACT was signed on April 7th for the sale of properties in South Carolina of the Associated Gas & Electric Corporation to the South Carolina Public Service Authority for a consideration of about \$40,000,000, it was announced by Denis J. Driscoll and Willard L. Thorp, trustees of the corporation.

This was said to be the largest sale of private electric power and light properties to a public agency since the Tennessee Valley Authority deals. It was the largest single sale of Associated Gas assets contemplated by the trustees, according to their announcement.

The facilities involved will supplement the operations of the Santee-Cooper power project, one of the largest public hydroelectric developments in the country. The properties already are interconnected with the Santee-Cooper system.

In arriving at a base price of \$40,000,000 some two years were spent in negotiations, the trustees said. "Independent engineers were employed and very extensive studies were required to establish the basis for negotiations," according to their statement.

The closing date in the contract is June 30th. The trustees expected to apply to Judge Vincent L. Leibell, presiding judge in Associated Gas reorganization proceedings, for authority to acquiesce in the transaction.

Under the plan of sale about \$20,000,000 would be paid to the General Gas & Electric Corporation, which owns all of the common stock and some of the bonds and other obligations of the South Carolina Electric & Gas Company and the Lexington Water Power Company, the two properties to be sold. General Gas is a subsidiary of the Associated Gas & Electric Corporation. About \$1,350,000 would be paid to other Associated subsidiaries, which own certain bonds in the two companies up for sale.

A new order halting all but one suit against the purchase by the Santee-Cooper project of Columbia utility properties was issued on April 7th by the state supreme court, and the petition for the order contained exhibits offering support from Washington quarters not only for the proposed purchase, but also the Santee-Cooper project itself.

One exhibit disclosed Santee-Cooper was negotiating with the Aluminum Company of America to sell it 30,000 kilowatts of energy. Another was the affidavit of an engineer who said the price to be paid for the properties is "fair."

The order specifically enjoined, temporarily, Frederick H. McDonald, of Charleston, who in the circuit court was suing to prevent the purchase, "from any further proceedings..." Also, it enjoined Judge William H. Grimbail, of the ninth circuit court of appeals from hear-

THE MARCH OF EVENTS

ing the McDonald suit at the present time.

Pending before the state supreme court, in its original jurisdiction, was a suit in which F. B. Creech, of Sumter, was the plaintiff, in

which a permanent injunction, forbidding the authority to make the big purchase, was asked. It was scheduled to be heard by the court on April 13th.

Tennessee

Gas Tax Upheld

MEMPHIS Natural Gas Company was held by the United States Supreme Court on March 30th to be liable for payment of the Tennessee state tax of 3 per cent on its net income from the sale of natural gas within that state. In dismissing the company's appeal the court pointed out that it has "often had occasion to rule that the retail sale of gas at the burner tips by one who pipes the gas into the state or by a local distributor acquiring the gas from another who has brought it into the state is subject to state taxation and regulation."

The supreme court of Tennessee had sustained the tax on the ground that it was laid on the company's net earnings from the distribution of gas under its contract with Memphis

Power & Light Company and it held that the distribution was not an action in interstate commerce under the statute, although the gas was piped into Tennessee from Louisiana. This ruling was upheld by the U. S. Supreme Court, which stated that "even if a taxpayer's business were wholly interstate commerce, a non-discriminatory tax by Tennessee upon the net income of a foreign corporation having a commercial domicile there, or upon net income derived within the state, is not prohibited by the commerce clause on which the taxpayer alone relies."

The Supreme Court rejected the company's request for modification of the decree of the Tennessee court because of the contention that some of the tax on profits was derived from sales of gas in interstate commerce.

Texas

Power Pioneer Passes

JAMES C. Kennedy, president of the Central Power & Light Company (which serves Corpus Christi, Texas) from 1932 to 1939, passed away suddenly at Bayview, Texas, on March 10th. He was sixty-five years old. Born in Indianapolis of Irish descent, Kennedy graduated in engineering from Tulane University in 1897.

As an employee of the company which is now the San Antonio Public Service Company, he installed the first power plant in Gulfport, Mississippi. From 1911 to 1918 he managed various utility properties and during World War I he was a Captain in the United States Army in charge of utilities at Fort Sam Houston.

He was active during the twenties in assembling various utility properties in east Texas.

Wisconsin

Commission Approves Plans

THE state public service commission on March 31st approved a construction program for the Wisconsin Power & Light Company, totaling \$606,000, to enable the company to serve the Badger Ordnance Works near Merrimac.

The construction includes interconnection of the company's 132,000- and 66,000-volt system by building a 24-mile line between Portage and Randolph, improving the Portage-Prairie du Sac line, and installing required equipment.

The company "has entered into a contract to supply energy to the Badger Ordnance works," the commission announced. The company indicated that the ordnance plant would be a temporary load and that the equipment in-

stalled to serve it would be removed when operations are discontinued, the commission said. However, the interconnection of the volt systems and the extension of arms on the Portage-Prairie du Sac line "are to be considered as permanent improvements."

Because the expansion of Camp McCoy, United States military reservation near Sparta, requires increased electric supply facilities, the state public service commission recently authorized the Northern States Power Company to construct a 94-mile transmission line from Sparta to the camp and to install a substation at a total cost of \$98,000.

The commission said the company had submitted a contract between the Federal government and itself which specified the rates to be charged and the method of financing.



The Latest Utility Rulings

State Commission Lacks Jurisdiction to Authorize Gas Line Construction

THE Wisconsin commission rescinded and vacated its order of January 2nd granting authority for the construction and operation of a natural gas pipe line by Wisconsin Gas Transmission Company (referred to in PUBLIC UTILITIES FORTNIGHTLY, issue of February 12, 1942, page 260). The commission upon reopening the case for further hearing and consideration decided that Congress, by amendment of the Federal Natural Gas Act since the order of January 2nd, had preempted the field to the exclusion of any power of the state of Wisconsin with respect to the authorization of the proposed construction and operation.

The Natural Gas Act as amended requires the issuance of a certificate by the

Federal Power Commission before the construction and operation of a natural gas pipe line into any new territory may be undertaken. Section 7(b) of the act as amended reads:

No natural gas company or person which will be a natural gas company upon completion of any proposed construction or extension shall engage in the transportation or sale of natural gas, subject to the jurisdiction of the commission, or undertake the construction or extension of any facilities therefor, or acquire or operate any such facilities or extensions thereof, unless there is in force with respect to such natural gas company a certificate of public convenience and necessity issued by the commission authorizing such acts or operations.

Re Wisconsin Natural Gas Co. (CA-1463, 1484, 1777).



Wholesale Natural Gas Rates Based on Original Cost

THE Federal Power Commission, acting on petitions filed by the city and county of Denver and by the Wyoming commission, instituted an investigation into the reasonableness of rates of Canadian River Gas Company, Colorado Interstate Gas Company, and Colorado-Wyoming Gas Company. The investigation has resulted in an order to reduce wholesale natural gas rates. The order contemplates a return of $6\frac{1}{2}$ per cent on prudent investment. The commission said:

We have considered the estimates of reproduction cost new less observed depreciation submitted by the Canadian Company and the Colorado Company but conclude that they are too conjectural to have probative value, as they are not based upon established facts, and, therefore, are subject to the vagaries of theories and imagination. We,

therefore, turn to the evidence of original cost of the properties involved to determine whether it provides an adequate basis for the establishment of the proper rate base.

The properties were of comparatively recent acquisition or construction. Accounting records had been sufficiently adequate and well maintained to permit a ready determination of all costs involved. The commission said that the basic facts were clear and essentially undisputed and they represented the best and only reliable evidence as to property values.

Contentions that Canadian River and Colorado Interstate were not natural gas companies within the meaning of the Natural Gas Act were rejected. Essentially the contentions were that the business was private and not affected with a

THE LATEST UTILITY RULINGS

public interest; that contracts were entered into privately before the passage of the Natural Gas Act; and that the companies had not held themselves out to serve the public generally but engaged only in serving natural gas to a selected number of customers. In addition, Canadian River contended that so far as it was engaged in the production and gathering of natural gas it was not subject to the jurisdiction of the commission.

The commission said that the question of jurisdiction was one of fact and law, that the facts were clear and admitted, and that all three companies were engaged in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of such gas for resale. In effect, said the commission, the companies challenged the constitutionality of the Natural Gas Act on the grounds that it attempts the regulation of private business, but the commission was mindful of the fact that already in other cases, where similar contentions were made and similar circum-

stances existed, the courts had upheld the constitutionality of the act.

The particular contention of Canadian, that in so far as it was engaged in the production and gathering of natural gas it was not subject to the jurisdiction of the commission, was called unsound. The company's production and gathering operations were said to be an integral part of its total operations. Furthermore, its operations were said to be an integral part of Colorado's operations and the two comprised a single operating system.

The commission also considered various questions relating to affiliated company profits, capitalization of past expenses, interest during construction, accrued and annual depletion, depreciation, amortization, contributions in aid of construction, going value, and revenues and expenses. The service life of the properties was set at more than fifty years. *Re Canadian River Gas Co. et al. (Docket Nos. G-124, G-118, G-121, Opinion No. 73).*



Coal Surcharge Permitted and Ruling on Combined Meter Readings Deferred

NEW schedules filed by the Central New York Power Corporation, successor of the Syracuse Lighting Company, Inc., provided for a seasonal minimum bill to be collected in advance subject to 2 per cent discount, for the combining for billing purposes of meter readings of one single-phase, low-tension supply and one 3-phase, 3-wire low-tension supply, and a coal surcharge applicable to power consumers. The provisions as to seasonal billing and coal surcharge were approved, but the proceeding was held open for determination of the proposed rule as to combining of meter readings until disposition of a general case relative to that subject.

The question arose whether there would be discrimination in favor of the customer with two meters but only one minimum charge and whether, on the

other hand, there would be discrimination if the company compelled a customer to take two meters and bill him two minimum charges while a near-by customer, because of a difference in the company's wiring system, would get exactly the same kind of service through one meter for one minimum bill. Commissioner Brewster, speaking for the commission, said:

If such a rule as here proposed is to be adopted, it should have general application and be made a part of the schedules of all companies in the state rendering service under similar conditions. If the present requirement of separate billings for each meter is discriminatory in the territory of the Central New York Power Corporation territory and that of the Buffalo Niagara Electric Corporation, then it is discriminatory in the territory of any other company where similar conditions of service exist.

Before making any determination as to

PUBLIC UTILITIES FORTNIGHTLY

the proposal of plural meter readings in the instant case, the commission should institute a proceeding directed to all electric operating companies to determine whether such a

rule should be applied on a statewide basis.

Re Central New York Power Corp.
(Case 8490).



Telephone Company Not Required to Deny Service Used to Aid Gambling

THE district court of appeals, second district, of California, in reversing judgment of conviction for perjury based on false information with respect to the furnishing of racing news, held that the attorney general had no authority to order a telephone company to discontinue service to a subscriber using the service in the aid of horse race gambling. The court referred to the jurisdiction of the railroad commission to regulate telephone companies and the rules and regulations which it had promulgated governing the right of a telephone company to discontinue service.

The court held further that the dissemination of racing news to bookmakers does not *per se* constitute a nuisance, nor does the furnishing of racing news to bookmaking establishments by telephone constitute an aiding and abetting in violation of the penal code. The court said:

It is not the transmission by use of a telephone of information concerning the results or probable results of horse races that constitutes a violation of the quoted penal code section, but it is the use which persons may make of such information in the acceptance of bets or maintaining places for the reception of bets that constitutes a violation of the law. . . .

Public utilities and common carriers are not the censors of public or private morals, nor

are they authorized or required to investigate or regulate the public or private conduct of those who seek service at their hands. Simply because persons who received information transmitted over the telephone facilities were enabled as a result of such information, if they were so inclined, to commit unlawful acts, does not make the telephone company a violator of the criminal laws. If such were the case, the telephone company would likewise be guilty in permitting its facilities to be used in transmitting information to the newspapers of the country as to prospective horse races or prize fights, because the information thus transmitted and published induced or enabled persons to engage unlawfully in betting on the results of such contests.

The telephone company has no more right to refuse its facilities to persons because of a belief that such persons will use such service to transmit information that may enable recipients thereof to violate the law than a railroad company would have to refuse to carry persons on its trains because those in charge of the train believed that the purpose of the persons so transported in going to a certain point was to commit an offense, or because the officers of such company were aware of the fact that the passengers were intent upon visiting a bookmaking establishment upon arrival at their destination, which establishment was maintained for the purpose of unlawfully receiving bets on horse races. Furthermore, the furnishing or receiving of racing or sporting information is not gambling and is not a crime.

People v. Brophy, 120 P(2d) 946.



Line Construction by Rural Coöperative Not Subject to Commission Regulation

THE Missouri commission in three cases involving complaints by telephone companies against electric coöperative organizations held that the coöperatives were not public utilities and were not subject to a Missouri statute

regulating construction, maintenance, and operation of electric lines. The telephone companies insisted that construction work by the coöperatives would result in electrical interference with telephone lines. The cases were disposed

THE LATEST UTILITY RULINGS

of, however, upon the jurisdictional ground.

A contention that the commission had jurisdiction over such coöperatives under Chap. 35, Art. 1 and Art. 4, Revised Statutes Missouri 1939, was overruled with the statement:

To hold that this commission has jurisdiction under Chap. 35, it is necessary for us to find that the defendant herein is a public utility rendering a public service. Pursuant to the decisions of the Missouri Supreme Court, we must find that the regulatory powers of the commission under public utility statutes are limited to persons or corporations who undertake to serve the public.

The commission was of the opinion that a nonprofit electric coöperative serving only its members is not such a public utility. The further contention was made that Chap. 33, Art. 7, R. S. Missouri 1939, gave the commission jurisdiction. This statute requires "every coöperative" constructing, maintaining, and operating such lines along highways to conform with regulations of the commission. Contained in the statute, however, is a section which provides that coöperatives may be organized under "this act" and that corporations organized under this act and corporations "which become

subject to this act in the manner herein-after provided are hereinafter referred to as" coöperatives.

The commission said that the legislature by this language restricted the meaning of the word "coöperatives" and the commission was concerned with the question as to how a corporation organized under the provisions of some other statute would become subject to the act. Section 5402 provides for conversion into a coöperative and becoming subject to the act after approval by the members or stockholders. These corporations had not adopted the procedure so provided.

Commissioners James and Van Osdell dissented. They were of the opinion that the words of § 5387 of the act should not be accorded the special significance of an exemption statute affording immunities from the provisions of § 5389. They did not believe that it was the main purpose and intent of the lawmakers to restrict regulation in the way the act was interpreted by the majority. *Meadville v. Farmers Electric Coöperative* (Case No. 9823); *Maple Grove Telephone Co. v. Barton County Electric Coöperative* (Case No. 9826); *Middle States Utilities Co. v. North Central Missouri Electric Coöperative, Inc.* (Case No. 10,089).



Abandonment of Rail Line Which Bars Flood-control Project

THE Supreme Court of the United States affirmed the decision of the district court for the district of Maryland dismissing a bill to annul an order of the Interstate Commerce Commission permitting the abandonment of a line of railroad and a discontinuance of service in the affected area where there was to be a government flood-control project which would result in inundating the intermediate portion of the line in question. (For lower court decision, see 41 F Supp 309, 42 PUR(NS) 386.)

The application to the commission for abandonment was not made because the line had been operating at a loss. On the contrary the commission concluded that

there was no evidence that the line had been a burden on the railroad system of which it was a part, or that a predictable decline in the volume of traffic would make it one in the future, if it were allowed to continue in existence undisturbed.

But this would be an impossibility in view of the flood-control project already begun by the War Department.

Authority of the War Department to submerge the line was not challenged, but the contention was made that, since the sole reason for abandonment was the flood-control project, the application should have been denied because of lack of jurisdiction to grant an abandonment

PUBLIC UTILITIES FORTNIGHTLY

on such grounds. The court, however, stated:

But under § 1(18) of the Interstate Commerce Act the standard prescribed for the commission in cases of this kind is whether "the present or future public convenience and necessity permit of such abandonment," 49 USCA § 1(18). It is difficult to imagine what consideration of present or future public convenience could reasonably impel the commission to decline to authorize abandonment of a line admittedly doomed to be rendered inoperable regardless of what action the commission might take. And the appellants suggest none. We must dismiss the appellants' contention on this point as without merit.

The further argument had been made that the order could not stand because of the failure to impose a condition that substitute service be provided by relocating the line. The commission had concluded that, considering the expenditure necessarily incident to relocation and the

increased costs of operating the line, such relocation was not justified by public convenience and necessity.

Objection was made to the consideration of relocation costs by the commission because, under the statute authorizing the War Department to construct flood-control projects, the cost of relocation would have to be borne by the government rather than the railroad. The court ruled that operation of the national railway system without waste was one of the purposes the Transportation Act was intended to further, and when materials and labor are devoted to the building of a line in an amount that cannot be justified in terms of reasonably predictable revenues, there is ample ground to support a conclusion that the expenditures are wasteful whoever foots the bill. *Purcell et al. v. United States et al.* (No. 803).



Profits to Affiliated Construction Company Excluded From Plant Cost

PROFITS to Columbia Improvement Company for construction work performed for St. Croix Falls Minnesota Improvement Company and St. Croix Falls Wisconsin Improvement Company were held by the Federal Power Commission not to be a proper part of the cost of electric plant of these companies but instead "write-ups or inflation properly includible in Account 107" representing electric plant adjustments. The commission had determined that all of these companies were affiliated by reason of relationship to Stone & Webster.

It was said to be impossible and unrealistic to attempt to determine whether profits paid to an affiliated construction company are "reasonable" profits. Comparison of over-all costs, including the affiliated company's profit, with what might have been cost if actual competition for the work had existed and if the work had been done by a nonaffiliated construction company was said to be sheer speculation. The commission re-

ferred to the principle that a trustee ought not to make a profit dealing with a trust. The relationship of Stone & Webster to the company was said to be essentially a fiduciary relationship.

Taking up the question of the disposition of these amounts when transferred to Account 107, the commission decided that these items should be disposed of by an immediate charge-off to earned surplus. Furthermore, the commission required the removal from the account, Electric Plant Acquisition Adjustments, by a charge to earned surplus, of an amount representing fees of Byllesby Engineering and Management Corporation in connection with acquisition of property, where it was found that no services were rendered in connection with acquisition. Also the commission eliminated interest during construction where plant was not constructed but was already in operation. *Re St. Croix Falls Minnesota Improvement Co. et al.* (Docket Nos. IT-5669, IT-5670, Opinion No. 72).

THE LATEST UTILITY RULINGS

New Jersey Court Upholds Board Findings on Rates

THE supreme court of New Jersey upheld an order of the board permitting an increase in water rates, holding that the determination was reasonable, where the board considered costs, reproduction costs, and value as an assembled operating and going concern. Experts testified to all elements, and their testimony varied on most points. The court said that it could hardly say, however, that the board's findings had no support in the proofs.

It had been contended that the company was paying entirely too much interest for borrowed money. The answer was that the utility was not in receipt of sufficient revenue to amortize any part of its debt, and that investors were not anxious to buy securities in companies which are in receipt of insufficient revenue to operate with certainty. The proofs did not show that the company could refinance its funded indebtedness, and the large indebtedness to a parent company on open account seemed to make it unlikely.

The company pays the parent company 4 per cent of gross operating revenue. Stone & Webster charged for a similar service 1.95 per cent. The court said concerning this point:

The management expense of the utility is high, being close to 10 per cent. It is hardly a fair basis for comparison to state the

figures of utilities operating in single municipality where the demand for its services are more constant. The utility board could not set aside the contract or reduce the yield thereon. Its function is all the factors considered to determine if the rate fixed is reasonable.

A rate too low results in inability to render efficient service. A rate too high is of disservice to the public. The same applies to the management contract. The officers of a business may, within reason, control its affairs. That other boards have differently viewed such items is no reason why the action under review was not proper. We are not at liberty to accept the objectors' testimony and reject that offered by the utility.

It was also urged that the board improperly accepted a depreciation theory that was too low. The substantial difference in figuring this item, said the court, was caused by including in reproduction cost property claimed by objectors to be a duplication and not used or useful, but, said the court:

A utility obliged to give service cannot be required to have its rate based merely upon property on constant use. A degree of duplication in plant facilities is inevitable in any utility, particularly where there is a wide seasonal variation in demand for the service. Suffice it that the board weighed all the testimony and arrived at a result supported by the proofs.

City of Long Branch et al. v. Board of Public Utility Commissioners et al. 24A (2d) 505. For decision by board, see 40 PUR(NS) 292.



Telephone Service Extension in Borderline Area

AUTHORITY to extend telephone service to borderline territory served by another company was denied on the merits by the Wisconsin commission on the ground that such extensions were not being effected in lawful manner and that public convenience and necessity had not been shown.

A Wisconsin statute requires the applicant to give notice of its intention to extend its facilities and service into occupied territory to both the existing tele-

phone company and the commission. Concerning this matter of notice the commission ruled that a petition for a hearing with respect to extensions of this nature does not constitute lawful notice of intention to do so, and that such an extension, based upon that petition, would be unlawful and the commission could not approve it.

This situation was complicated by the fact that, in reliance upon advice from a member of the commission's staff, the

PUBLIC UTILITIES FORTNIGHTLY

applicant had already made certain extensions. As to this the commission said:

These circumstances are regrettable but they are not sufficient to legalize the extension of lines and service thus made. The commission is bound to follow the law fully as much as New Rockland Telephone Company. It cannot approve applications for extensions of telephone lines in towns where there has been no compliance with statutory requirements. It follows that the application in this proceeding must be dismissed.

The commission, wishing to dispose of the case on the merits, as well as on a

procedural basis, found that public convenience and necessity did not require the service extension. It was shown that the new service would be more convenient for some of the residents of the area, but the commission ruled that public need for the invasion by one telephone company of the area served by another such company is not shown by demonstrating the convenience of a few persons who merely prefer the service of one company to that of another. *Re New Rockland Telephone Co. (2-T-913)*.



Other Important Rulings

THE Arkansas Supreme Court upheld a decree enjoining a travel bureau from operating before complying with the Motor Carrier Act, holding that the requirement that an operator of a travel bureau procure a license is valid and not an unlawful interference with interstate commerce although such a broker may arrange for transportation of passengers for points outside the state. *Duck v. Arkansas Corporation Commission*, 158 SE(2d) 24.

The supreme court of Georgia held that the operation by a motor common carrier, at a municipality lying on its route, of a truck to pick up and deliver freight which is to be or has been shipped from or to patrons at such municipality, is an incident of the carrier's business of transporting freight, within the Code, § 68-623, and by virtue of that section it is exempt from local taxation. *Acme Freight Lines, Inc. v. City of Vidalia*, 18 SE(2d) 540.

The Pennsylvania commission, in denying a petition for rehearing, stated that it had properly ignored, in its order, plaintiff's request for a jury trial of the issues involved in a proceeding before it, since the right to jury trial is not a matter to be considered or dealt with by the commission. *Pennsylvania Publications*,

Inc. v. Bell Telephone Co. of Pennsylvania (Complaint Docket No. 13386).

The Wisconsin commission, in considering an application for authority to revise electric rates, pointed out that the utility differed from most others in that it did not serve all the users of electricity in the community but that it had been organized to take over the utility business of a lumber company, and the lumber company had elected to sell part of the energy developed at its mill to the utility and to serve other premises directly. Service to such premises, it was ruled, is not utility service and thus not within the jurisdiction of the commission. *Re Goodman Light & Power Co. (2-U-1760)*.

The Pennsylvania commission granted the petition of railroads operating in the commonwealth to file upon less than statutory notice, with waiver of tariff rules and intermediate rules and modification of outstanding orders, tariffs making effective on intrastate traffic the general increases permitted by the Interstate Commerce Commission order of March 2, 1942, Commissioner Beamish dissenting emphatically from the action of the majority of the commission. *Re Special Permission No. 20555 (Railroad freight rate increases)*.

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

PREPRINTED FROM

Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND
RECOMMENDATIONS OF COURTS AND COMMISSIONS



VOLUME 42 PUR(NS)

NUMBER 4

Points of Special Interest

SUBJECT	PAGE
Holding company dissolution - - - -	193
Redemption of outstanding debentures - -	193
Determination of accrued depreciation - -	206
Reopening of rate case - - - - -	206
Return to telephone company - - - - -	224
Historical cost theory of valuation - - -	228
Service discontinuance because of arrearages -	228
Municipal plant extraterritorial service - -	241
Sale of electric property to rural electric association	247
Warehouse rate increase - - - - -	252
Accounting for bond expenses - - - - -	255

Q These reports are published annually in five bound volumes, with an *Annual Digest*. The volumes are \$6.00 each; the *Annual Digest* \$5.00. A year's subscription to PUBLIC UTILITIES FORTNIGHTLY, when taken in combination with a subscription to the Reports, is \$10.00.

Titles and Index

TITLES

Boscobel Teleph. Co., Re	(Wis.)	224
California Warehouse Tariff Bureau, Re	(Cal.)	252
Edison Light & P. Co., Public Utility Commission v.	(Pa.)	206
La Junta, Re	(Colo.)	241
Marysville Water Co., Stoner v.	(Pa.)	228
Southern Counties Gas Co., Re	(Cal.)	255
United Light & P. Co., Re	(S.E.C.)	193
Western Colorado Power Co., Re	(Colo.)	247



INDEX

Accounting—bond expense, 255.	Procedure—reopening of rate case, 206.
Certificates of convenience and necessity— municipal plants, 241.	Rates—flat or meter, 228; quarterly minimum charge, 228.
Consolidation, merger, and sale—Commission jurisdiction, 247.	Return—telephone company, 224.
Corporations—dissolution, 193.	Security issues—redemption by holding com- pany, 193.
Depreciation—annual allowance, 206.	Service—grounds for denial, 228; installation rules, 228; rules as to discontinuance, 228.
Expenses—interest, 252; rentals, 252.	Valuation—abandoned property, 228; accrued depreciation, 206; historical cost, 228; re- production cost, 206.
Monopoly and competition—municipal and privately owned plants, 241.	
Payment—service discontinuance because of arrearage, 228.	



RE UNITED LIGHT AND POWER CO.

SECURITIES AND EXCHANGE COMMISSION

Re United Light & Power Company et al.

[File Nos. 54-25, 59-11, 59-17, Release No. 3345.]

Security issues, § 5.1 — Redemption by holding company — Premium — Dissolution under Holding Company Act.

1. A holding company which has been ordered to dissolve and to dispose of its assets pursuant to the requirements of § 11 of the Holding Company Act, 15 USCA § 79k, is not required to pay a premium to holders of outstanding debentures, in addition to par and accrued interest, where the debenture agreement (drafted long before the Holding Company Act was enacted) provides a premium upon voluntary redemption prior to maturity, p. 195.

Security issues, § 5.1 — Redemption — Premium — Holding company dissolution — Possibility of successor corporation.

2. Failure of a holding company, ordered to dissolve pursuant to § 11 of the Holding Company Act, 15 USCA § 79k, to have debenture indebtedness assumed by a successor corporation (as provided in a debenture agreement), as part of a plan of liquidation and dissolution, does not demonstrate that the company exercised its free will in choosing to pay off the debentures, so as to subject it to liability for redemption premium, when there is available no company in the system which could legally assume the indebtedness, p. 195.

Security issues, § 5.1 — Complication of structure of holding company system.

3. Unnecessary complication of the structure of a holding company system would result if debentures of a top holding company were to remain outstanding by having them assumed by a subsidiary holding company while the top holding company has funds for their payment, p. 195.

Corporations, § 21 — Dissolution — Compensation to debenture holders.

4. Holders of debentures of a top holding company which has been ordered to dissolve are not entitled to compensation for the termination of their investment when redemption provisions for premium payments are inapplicable, since termination of the investments of debenture holders and stockholders alike is brought about by congressional mandate, p. 204.

[February 25, 1942.]

APPPLICATION proposing plan for immediate payment of long-term debt represented by debentures of a holding company which has been ordered to dissolve; plan approved.

APPEARANCES: Donald R. Richberg and Park Chamberlain, of Washington, D. C., and John Dern of Chicago, Illinois, Attorneys, for the United Light and Power Company; Davies, Richberg, Beebe, Busick & Richardson, and Sidley, McPherson, Austin & Burgess, of counsel; Ben Leroy Stow-

SECURITIES AND EXCHANGE COMMISSION

ell of Humes, Buck, Smith & Stowell, New York city, for the New York Trust Company; Jacob Chaitkin of Moss, Marcus, Chaitkin & Gardener, New York city, for Richard Schuster and Ines Stross; Louis F. Davis, Ralph T. McElvenny, and Vincent R. Brogna, for the Public Utilities Division of the Commission.

By the COMMISSION: The primary issue presented by Application No. 8 is whether the applicant, the United Light and Power Company (a registered holding company, hereinafter referred to as "Power"), may pay off its outstanding debentures at par and accrued interest, or whether it must also pay to the holders thereof a premium of 9 per cent of the principal amount. The application was filed by Power pursuant to an order issued by us on March 20, 1941, under § 11 (b) (2) of the Holding Company Act, 15 USCA § 79k(b) (2), directing the liquidation and dissolution of Power and requiring it to make application to us for the entry of any further orders necessary or appropriate for such purpose. Our order further provided

that Power might submit to us for our approval a plan proposing a method of effecting such liquidation and dissolution on a basis which should be fair and equitable to its security holders; and we expressly reserved jurisdiction to enter such further orders in this proceeding as might be necessary or appropriate for the purpose of carrying out the steps required by the order of March 20th.¹

The debentures in question, aggregating \$15,093,800 principal amount, consist of three series issued in 1923,² 1924, and 1925, each of fifty years' maturity, bearing interest at coupon rates of 6 per cent, 6½ per cent, and 6 per cent, respectively. Power asks our approval of a plan whereby it would pay these off immediately at par and interest accrued to May 1, 1942, without premium. The New York Trust Company, as trustee for each series, has appeared on behalf of all the debenture holders and contends that under the terms of the several indentures a premium of 9 per cent must be paid as in the case of a voluntary redemption.³ Two individual debenture holders have appeared by

¹ Re The United Light & P. Co. (1941) Holding Company Act Release No. 2636. We there found that the liquidation and dissolution of Power were steps necessary to comply with the requirements of § 11(b)(2), which makes it the duty of this Commission, "as soon as practicable after January 1, 1938:

"(2) To require by order, after notice and opportunity for hearing, that each registered holding company, and each subsidiary company thereof, shall take such steps as the Commission shall find necessary to ensure that the corporate structure or continued existence of any company in the holding company system does not unduly or unnecessarily complicate the structure, or unfairly or inequitably distribute voting power among security holders, of such holding company system. In carrying out the provisions of this paragraph the Commission shall require each registered holding company (and any company in the

same holding company system with such holding company) to take such action as the Commission shall find necessary in order that such holding company shall cease to be a holding company with respect to each of its subsidiary companies which itself has a subsidiary company which is a holding company. Except for the purpose of fairly and equitably distributing voting power among the security holders of such company, nothing in this paragraph shall authorize the Commission to require any change in the corporate structure or existence of any company which is not a holding company, or of any company whose principal business is that of a public utility company."

² The debentures of this series were originally issued by United Light and Railways Company (Maine) and were later assumed by Power.

³ The plan provides that if it is approved by us, Power will promptly deposit in escrow

RE UNITED LIGHT AND POWER CO.

counsel and take the same position. We referred the matter to a trial examiner for the taking of evidence,⁴ briefs were exchanged and filed, and on February 17, 1942, we heard oral argument.

[1-3] The precise controversy is one of first impression under the Holding Company Act, and judicial precedents do not appear to be directly in point. Prompt determination, however, is of the essence inasmuch as substantial interest charges are running on the debentures and Power is earning no return upon the funds which it holds ready for their payment. Fortunately, the very able presentation of both sides of the question by counsel has been of much assistance to us in expediting the matter; and the plan itself contains provisions which, in the event of judicial review of our order herein, will preserve the rights of the security holders without delaying payment of the debentures as to principal and interest.⁵ Under all the circumstances, more fully set forth below, we have concluded that the plan should be approved forthwith.

Early in this proceeding it was pointed out that Power's holding company system was repugnant to the requirements of the "great-grandfather" clause of § 11(b) (2) of the Holding Company Act, in that Power was a

holding company superimposed upon two tiers of subholding companies. Under the great-grandfather clause it was our duty to require Power and any company in its holding company system "to take such action as the Commission shall find necessary in order that [Power] shall cease to be a holding company with respect to each of its subsidiary companies which itself has a subsidiary company which is a holding company." In canvassing the possible methods of compliance, three separate plans were presented for our consideration. The first proposal involved elimination of Power; the second, elimination of the United Light and Railways Company, a subsidiary holding company of Power; and the third contemplated the elimination of Continental Gas & Electric Corporation and American Light & Traction Company, subsidiary holding companies of the United Light and Railways Company.

After holding appropriate hearings and considering the available alternatives we concluded:

"Under all the circumstances of this case and on the record presented, we find that the liquidation and dissolution of the United Light and Power Company . . . are steps necessary to comply with the requirements of the statute."⁶

By our order dated March 20, 1941,

cash in an amount equal to the redemption premium of 9 per cent and, in case a review of our order approving the plan shall be sought and in case it shall be finally determined in such proceedings for review that the debenture holders are entitled to receive the redemption premium, the funds so deposited will be distributed to the debenture holders; otherwise such funds shall be returned to Power or its assigns.

⁴ See Notice of Filing and Order Reconvening Hearing, Holding Company Act Release

No. 3287 (January 24, 1942). Such hearing was directed specifically to questions raised by the application proposing the plan, but the record of the entire proceeding to date is before us in so far as it pertains to the problems under discussion. The proceeding under § 11(b) (2) was instituted on December 6, 1940.

⁵ See the escrow provisions outlined in footnote 3, *supra*.

⁶ Re The United Light & P. Co. (*supra*, footnote 1), mimeograph p. 12.

SECURITIES AND EXCHANGE COMMISSION

based on such finding and pursuant to § 11 (b) (2) of the act and particularly the great-grandfather clause thereof, we directed that:

"1. The United Light and Power Company shall be liquidated and dissolved.

"It is *further ordered* that the respondents shall proceed with due diligence to comply with the foregoing order, and shall make application to the Commission for the entry of any further orders necessary or appropriate for this purpose; and the respondent, the United Light and Power Company, may submit to the Commission herein for its approval a plan proposing a method of complying with Paragraph 1 of the foregoing order on a basis which is fair and equitable to its security holders, and providing for a determination of the relative rights and interests of its security holders in connection therewith; and jurisdiction is hereby expressly reserved to enter such further orders in this proceeding as may be necessary or appropriate for the purpose of carrying out the steps hereinbefore required in this order."

No petition for review of such order was filed, and the time for seeking such review has long since expired.⁷

Liquidation and dissolution of Power having become necessary for compliance with § 11 (b) (2), it fol-

lows that some appropriate method for effecting such liquidation and dissolution is likewise necessary. The most obvious method of liquidating a corporation is to call in its assets and settle with its creditors and debtors, extinguishing all indebtedness.⁸ The plan proposed here conforms with such a method of liquidation.

Counsel for the trustee and the debenture holders have made much of the claim that Power could have had the debenture indebtedness assumed by a successor corporation, as provided in the debenture agreements, as part of a plan of liquidation and dissolution. Failure to do so, they say, demonstrates that Power exercised its free will in choosing to pay off the debentures now and hence, they claim, the redemption premium must be paid. The choice, however, was not in fact an exercise of free will on the part of Power. At the hearings on which our order of March 20, 1941, was based, consideration was given to the possibilities of disposing of these debentures in some manner other than by liquidation, and the record in this proceeding demonstrates that such other possibilities, including the transfer of the indebtedness, were not feasible. For example, there is uncontradicted testimony of the vice president of Power that no company in the system was in a position to assume the debenture indebtedness.⁹ Upon examining the corporate structure of such

⁷ Section 11 (b) of the act specifically makes applicable the provisions for review contained in § 24(a), 15 USCA § 79x(a).

⁸ "The term 'liquidation' has a fairly defined legal meaning. As applied to a corporation, it means the winding up of the affairs of the corporation by getting in its assets, settling with creditors and debtors and apportioning the amount of profit and loss." Fletcher, *Cyclopedia of the Law of Private*

Corporations, Vol. 16, p. 711 (Prem. Ed. 1933). *Bouvier's Law Dictionary* (1914) defines "liquidate" as follows: "To pay; to settle; to adjust and gradually extinguish all indebtedness."

⁹ H. B. Munsell, vice president and assistant to the president of United Light and Power Company, testified as follows:

"However, it does seem clear from an ex-

RE UNITED LIGHT AND POWER CO.

companies, the terms on which their securities were issued, and other matters, we have no doubt as to the correctness of that conclusion.

The only company in the system appearing to be suitable as a successor to Power is its subsidiary United Light and Railways Company (a registered holding company, hereinafter referred to as "Railways"), and it is this company which the plan contemplates leaving as the top holding company of the system after dissolution of Power. Railways already has substantial debt and preferred stock outstanding. It could not assume Power's debentures without (a) the consent of the trustee under the Railways debenture agreement, and (b) the approval of this Commission under § 7 of the act, 15 USCA § 79g. It is to be doubted that the trustee for Railways' debentures would, under the circumstances, be justified in consenting to such assumption, but we make no finding as to that. An examination of the corporate structure of Railways and its subsidiaries demonstrates that an assumption of the Power debentures by Railways would not be permissible under the standards of § 7.

But even if assumption of the debentures by some other company were permissible under § 7, it would run counter to the standards of § 11 (b) (2) which direct us to require Power and each subsidiary thereof "to take such steps as may be necessary to ensure" that its corporate structure or continued existence "does not unduly or unnecessarily complicate the structure" of its holding company system. Power has the funds for the payment

of these debentures. To let the debentures remain outstanding is unnecessary, and they would thus unnecessarily complicate the structure of the system. This is not to say that because payment of the debentures is a necessary step under the act, that circumstance alone relieves the company of a duty to pay the premium. Other pertinent circumstances must determine that question. But it is plain that payment of the debentures, with or without premium, cannot in this instance be avoided merely by having them assumed by some other company of the system.

On the question whether the payment of the debentures must be made on the basis of the redemption price provided in the agreement, we turn to the terms of the debentures themselves.

The debentures of each series contain terms which are in all material respects identical, so that they may be considered together. The pertinent provisions may be summarized as follows:

(1) Each debenture is "subject to redemption at the option of the company . . ." upon payment by the company of the principal amount plus accrued interest and a premium which, at the present time, would be equal to 9 per cent of the principal amount. The covering agreements contemplate that redemption is a "right" belonging to the company, and provide that "Notice of the election of the company to redeem . . . shall be given . . . such notice shall state that the company has elected to redeem and pay off . . . debentures."

amination of the corporate structure of the United Light and Power Company system

that there is no other company that could assume the payment of these debentures."

SECURITIES AND EXCHANGE COMMISSION

(2) The debentures also provide that "The principal of all the debentures . . . may be declared or may become due and payable (in case of default or otherwise) upon the conditions, in the manner and with the effect provided in said agreement." The debenture agreements provide that upon certain events of default the trustee may in its discretion, or shall at the request of a majority in amount of the outstanding debentures of the particular series, by notice to the company declare the principal of all such debentures to be due and payable immediately. Such events of default include, *inter alia*, (i) default in any instalment of interest continuing for ninety days, (ii) default, "for any reason whatsoever, voluntary or involuntary . . . in the observance or performance of any of the other covenants, agreements, and conditions in said debentures or in this agreement expressed . . ." and (iii) the event of an order "made by a court of competent jurisdiction appointing a receiver or trustee of the company or of its assets . . ." Upon delivery or mailing of such notice by the trustee the principal of the debentures, "together with all accrued interest thereon, shall become and be due and payable immediately."

(3) In the absence of redemption at the election of the company or acceleration of maturity by the trustee, the debentures become due at their principal amount upon the maturity dates expressed therein—January 1, 1973, May 1, 1974, and November 1, 1975, respectively.

(4) The agreements further provide that "Nothing contained in this agreement . . . shall prevent any

consolidation or merger of the company with any other corporation or any lease, sale, conveyance, or transfer to a corporation . . . of all the property of the company as an entirety; provided . . . that [such corporation] shall, as part of such consolidation, merger, purchase or conveyance, expressly assume to make due and punctual payment of the principal of and interest on all of the debentures and to keep and perform all of the covenants and conditions in this agreement required to be kept or performed by the company . . ." Upon assumption by such corporation of the debentures in the manner provided, the company (the original party to the debenture agreement) "shall thereupon cease to be such party and shall no longer be liable for the payment of the debentures . . . and may be dissolved."

Thus, it will be noted, the draftsmen of the debenture agreements contemplated a number of possibilities: first, that the debentures might remain outstanding until their maturity as the valid obligations of the issuing company; second, that they might be assumed by and remain outstanding until their maturity as the obligations of a successor corporation merged or consolidated with the issuing company or to which the assets of the issuing company were transferred as an entirety; third, that the obligor, for the benefit of itself or its stockholders, might voluntarily redeem the debentures prior to their maturity, in which event the obligor would be required to pay a premium; and fourth, that in the event of a default by the obligor, the trustee on behalf of the debenture holders might desire or be required to ac-

RE UNITED LIGHT AND POWER CO.

celerate the maturity of the debentures, in which event no premium would be payable.

It may be conceded that in drafting these indentures, almost twenty years ago, the parties could not have had in mind the type of situation that has now arisen under a statute enacted in 1935. Considering the structure of the agreements we believe that the redemption provision should not be deemed applicable to the situation which has now arisen. We believe that the obligation to pay a premium was intended to arise only when the company was to continue as a going concern, for the payment thereof is in the nature of compensation payable by the company (i. e., its stockholders) to the debenture holders for depriving the latter of their investment. In a going concern, the stockholders may be deemed to benefit from the elimination or reduction of the debt effected by the redemption, and the premium may be regarded as the prearranged amount payable by them for such benefit.

But here the company does not continue as a going concern. There is no question of free choice or election. The company, by virtue of congressional mandate, is to terminate its existence. Power must liquidate not only its debt but also its stock. The rights of debenture holders and stockholders alike, to retain their respective investments, are cut off. Such holders must, of course, be compensated out of the estate to the full extent of their lawful claims. It is the extent of the debenture holders' lawful claim that is presented for determination here.

In the absence of some legal or equitable right to compensation over and

above the face amount of their debentures and accrued interest thereon, which they will receive in cash, there is no basis for awarding the debenture holders more than that at the expense of the stockholders, whose investment in the company as a going concern is also being terminated. The company's lack of free choice to continue in business, making liquidation necessary, renders inapplicable the provision for redemption and payment of a redemption premium, and nowhere in the debentures or the agreements is any contract right vested in the debenture holders to receive more than their principal and accrued interest in these circumstances.

Counsel for the debenture holders suggests that in the broad view, the transactions proposed in the plan constitute a merger of Power into its subsidiary, Railways, inasmuch as the stockholders of Power will receive in liquidation principally the common stock of Railways. Thus, it is argued, they will retain an interest in the system which will go on much as before, and the stockholders of Power will still have an interest in a going concern. Counsel concludes that for this reason the payment of the debentures is subject to the contract provisions applicable to redemptions.

The plan, however, would not effect a merger. Its results as to the stockholders of Power will not be governed by the principles applicable to a merger. We have found that liquidation was necessary to effect compliance with § 11 (b) (2), and it is not yet clear whether or not all the classes of stockholders of Power will be entitled to participate in the distribution of its assets after liquidation of its in-

SECURITIES AND EXCHANGE COMMISSION

debtedness, or if they do, what the extent of such participation will be. Power has outstanding \$60,000,000 of \$6 cumulative preferred stock, upon which \$35,100,000 of dividends were in arrears on December 31, 1941. The common stock is divided into two classes. The only sure fact is that, as a result of the liquidation of Power, the stockholders will not emerge with the same interests in the enterprise that they now possess; and their consent is not essential either to the dissolution of Power or to the terms of the distribution of assets. Nor will dissenters necessarily have the rights incident to a statutory merger, to receive the appraised value of their stock in cash in place of a stock interest in Railways. The stockholders of Power must, of course, be given fair and equitable treatment according to their present interests in the company. In many respects the transaction as a whole more nearly resembles a compulsory dissolution under the antitrust laws or a liquidation in bankruptcy. It is no more voluntary on the part of the stockholders than on the part of the debenture holders.¹⁰

¹⁰ The fact that the application of Power was designated as being filed under § 11(e) of the act is not of controlling importance. It was filed as permitted by our order pursuant to § 11(b)(2), and it is § 11(b)(2), as applied to the particular holding company system, that is the moving force.

¹¹ It is equally true that the debentures and agreements are barren of any provision that would give the company a right to liquidate the debt prior to maturity without payment of a premium. As we have pointed out above, however, it is the statute which causes the liquidation, and not the company seeking to exercise a privilege.

Perhaps it should be noted that our order providing for liquidation was entered almost a year ago, and that § 11(c) requires compliance with such an order within one year,

In view of all the foregoing, we are impelled to the conclusion that the terms of the debentures and the covering agreements create no contractual obligation on the part of Power to pay a redemption premium and no right on behalf of the debenture holders to receive such premium.¹¹ We further conclude that no such obligation or right exists by virtue of any other recognized legal or equitable principle. Such conclusion, we think, is neither in conflict with judicial precedents nor inconsistent with our own previous decisions.

The rule of absolute priority, applied by the Supreme Court in the Los Angeles Lumber and Consolidated Rock Cases,¹² is not relevant to the point at issue. The rule does not create rights, but merely requires that such rights and priorities as the senior claimants possess must be recognized and fully compensated in a plan of reorganization before awards are made to junior claimants. The debenture holders are to receive the full amount of their principal and accrued interest in cash, and unless they establish a right to the redemption premium as

subject to a possible extension of time by our further order. If the company fails to comply within the prescribed time, we are authorized by § 11(d) to apply to a court of competent jurisdiction for the enforcement of our order, and the court may, under that section, appoint a trustee to hold and administer the assets of the company. In that situation, it would seem that an event of default as defined in the debenture agreements would have occurred, and it might well be the duty of the debenture trustee to declare the principal of the debentures due and payable. There could then be little doubt that the debentures could be fully discharged without the payment of a premium.

¹² Case v. Los Angeles Lumber Products Co. (1939) 308 US 106, 84 L ed 110, 60 S Ct 1; Consolidated Rock Products Co. v. DuBois (1941) 312 US 510, 85 L ed 982, 61 S Ct 675.

RE UNITED LIGHT AND POWER CO.

well, there is nothing on which the absolute priority rule can operate.

In *Manufacturers Trust Co. v. Roanoke Water Works Co.*¹³ a case on which the trustee and debenture holders appear to place much reliance, the court held that bondholders could not be compelled to accept payment of the principal of their bonds unless they were paid a redemption premium. Some of the facts were analogous to those present here. The company's property had been acquired by the city of Roanoke in condemnation proceedings, and thus as a practical matter its business was involuntarily terminated. The terms of the bond indenture, however, differed substantially from those in the present case. The indenture specifically provided that in the event property securing the bonds was taken in condemnation proceedings, the proceeds should go to the indenture trustee in lieu of such property and be used by the trustee, subject to certain conditions, to redeem outstanding bonds at a premium under the general provisions of the indenture applicable to redemptions.

In another case, *Harnickell v. Omaha Water Co.*¹⁴ the New York courts reached a similar result, but again the facts are substantially different. There the company operated waterworks under a franchise granted by the city of Omaha, Nebraska, pursuant to which the city expressly reserved to itself the right "at any time after the expiration of twenty years to purchase the said waterworks at an appraised valuation. . . ." The

company placed this property under two mortgages and issued bonds thereunder maturing long after the expiration of the 20-year period, reserving the right to redeem the bonds at a premium. The bond indentures did not mention the option to purchase reserved by the city under the franchise, nor did they provide for acceleration of the maturity of the bonds in the event the city exercised such option.¹⁵ The court held that the bondholders were entitled to rely on the mortgage for the terms under which they made their investment, without examining the separate terms of the franchise. The company, on the other hand, knew about the option in the franchise, yet failed to provide a means by which it could pay off the bonds without premium if the option were exercised. The court took the view that the company was not compelled to terminate its business or pay off the bonds before maturity. In this connection the court said: "That is a matter over which the company has control."¹⁶ The rationale for the decision clearly is that the precise event giving rise to the desire of the company to accelerate the bonds was easily foreseeable by the company at the time the bond indenture was drawn, and the company must be deemed to have intended that on the happening of such event the only way it could compel the bondholders to accept payment before maturity was by paying the premium. But in the case before us, as we have seen, Power had no way of foretelling the event

a premium in the event the property was sold, as the court said, on foreclosure, but this was held to be inapplicable.

¹³ (1939) 172 Va 242, 1 SE(2d) 318.

¹⁴ (1911) 146 App Div. 693, 131 NY Supp 489; aff'd on opinion below (1913) 208 NY 520, 101 NE 1104.

¹⁵ There was provision for payment without

¹⁶ *Supra*, 131 NY Supp at p. 495.

SECURITIES AND EXCHANGE COMMISSION

which now terminates its existence, and no reason to provide against it in the debenture agreements; nor has it the option to forestall liquidation. It is not the exercise of a privilege by the company, but the impact of law requiring liquidation of the company, which causes prepayment of the debentures in question.

In a third case, *Oshkosh Waterworks Co. v. Railroad Commission*,¹⁷ the Wisconsin Commission had fixed the compensation to be paid to the company upon condemnation of its property and at the same time ordered the company to pay the redemption premium on its bonds. The court decided nothing more than that the Commission's order was binding on the company.

On the other hand, we believe that the practice and the few existing judicial precedents, in other situations related to the type of liquidation which we have here directed, tend to support the conclusion we have reached. The type of liquidation which Power is undergoing under compulsion of the act and under our supervision is similar to a bankruptcy liquidation, there being only the difference (which is unimportant for present purposes) that here, unlike the typical bankruptcy, a residual portion of the assets will remain for stockholders and they may receive it in kind rather than in cash. Indeed, if we should ultimately apply to a court under § 11 (d) of the act to enforce compliance with our order, even the procedural aspects of the enforcement of our order will re-

semble a bankruptcy liquidation or reorganization, for the trustee appointed in such proceeding will have power, with the approval of the court, to dispose of any or all of the assets or to dispose of them in accordance with a fair and equitable reorganization plan.

In liquidation or reorganization proceedings, either in bankruptcy or in equity, the proceeding is regarded as maturing all claims to be dealt with in the proceedings, even those which have not matured by their terms or by acceleration, and the amount of the claim is regarded as based on its face amount plus accrued interest, without regard to any redemption premium. See e. g., § 63 (a) (1) of the Bankruptcy Act.

In the recent reorganization of a railroad under § 77 of the Bankruptcy Act, 11 USCA § 205, the holders of an issue of unsecured convertible "bonds" were awarded new stock on the same basis as other general creditors, in the plan approved by the Interstate Commerce Commission.¹⁸ These "bonds" did not mature until 1949, and were redeemable only at a premium. Their holders for this reason objected that they should receive better treatment than general creditors, but their contention was rejected, the district court saying:

"The convertible bonds were properly classified as unsecured claims and with other unsecured claims even though they could only be called prior to maturity at a premium."¹⁹

On appeal, the same contention was

¹⁷ 161 Wis 122, PUR1915D 336, 152 NW 859, LRA1916F 592.

¹⁸ Re Chicago & N. W. R. Co. (1939) 236 Inters Com Rep 575. Two plans proposed by the debtor and the "group committees" so

42 PUR(NS)

treated these security holders; the Commission selected the latter plan with modifications, scaling down the new capitalization.

¹⁹ In Re Chicago & N. W. R. Co. (1940) 35 F Supp 230, 255.

RE UNITED LIGHT AND POWER CO.

made and was overruled by the circuit court of appeals without separate discussion. The order approving and confirming the plan was affirmed.²⁰

Another case, decided by the Maryland court of appeals,²¹ deals with the valuation of redeemable preferred stock upon a consolidation of two companies. It is of particular interest in view of the argument made before us by counsel for the debenture holders that the present plan in substance effects a merger. The consolidation in question was objected to by holders of preferred stock who, under the applicable statute, were entitled to be paid the appraised value of their stock in cash instead of accepting the securities distributable to them under the plan of consolidation. The asset value of the preferred stock of one of the companies was in excess of both the liquidation value and the redemption value, and the holders of that stock claimed that they should be given the full redemption value. The court held otherwise, saying:

"The right to a redemption premium was, however, a contractual one which was not enforceable by the stockholder until, and if, the corporation should exercise its election to redeem, and the corporation had not made this election which was a condi-

tion precedent to any benefit to the owner of stock."²²

A similar view was taken by this Commission in *National Power & Light Co.*²³ a report which we made on a plan filed by National pursuant to our order that it be dissolved in accordance with the requirements of § 11 (b)(2) of the act. The problems discussed in our report included the question whether the plan was fair and equitable to security holders in respect of a proposed exchange, offered by National to its preferred stockholders, on the basis of two shares of common stock of a specified subsidiary company for each one share of National's preferred stock surrendered. Such exchange was offered on a voluntary basis, and while we did not undertake to determine the precise value of either National's preferred stock or the subsidiary's common stock, we considered the asset values underlying the preferred stock to be in excess of the liquidating preference of \$100 per share. The call price was \$110 per share. In our report we proceeded on the theory that the preferred stockholders were not entitled to compensation in respect of the call premium, saying:

"In view of the fact that we have ordered National to be dissolved, we consider it necessary for present purposes,

²⁰ In *Re Chicago & N. W. R. Co.* (1942) — F(2d) —, C.C.H. Bankruptcy Law Service, Ct. Dec. Par. 53,619. See also *Chicago, M. St. P. & P. R. Co.* (1940) 239 Inters Com Rep 485, 240 Inters Com Rep 257, where no distinction was made between noncallable bonds and bonds redeemable at a premium, each being recognized and compensated for principal and interest only. The plan was approved (1940) 36 F Supp 193, but was sent back to the Commission for valuation findings (1941) — F(2d) —, C.C.H. Bankruptcy Law Service, Ct. Dec. Par. 53,495.

²¹ *American General Corp. v. Camp* (1937) 171 Md 629, 640, 190 Atl 225. Power, incidentally, is a Maryland corporation.

²² *Id.*, at p. 230. Since in that case the consolidation was voluntary on the part of the common stockholders, the rejected argument of the preferred stockholders may be regarded as stronger than that of the debenture holders in the present case. Compare *Nachman v. Tennessee Electric Power Co.* (1940) 174 Misc 425, 21 NY Supp(2d) 280.

²³ (1941) Holding Company Act Release No. 3211.

SECURITIES AND EXCHANGE COMMISSION

to discuss only the liquidating preference, rather than the call price."²⁴

After some discussion of National's debt, which it proposed to retire out of current assets, we said:

"Therefore it may be considered that National's preferred stock has substantially a first claim against all the assets contained in National's portfolio to the extent of its liquidating preference. . . ."²⁵

There was no contention in that proceeding that any allowance should be made in respect of the call premium,

indicating that many of Power's debenture holders bought their debentures at a discount, and Power suggests that the plan is for that reason more than fair to them. In reply, it was pointed out that some investors purchased at more than par.²⁷ Counsel for the Public Utilities Division submitted a computation showing that an investor purchasing debentures at the highest prices reached since their issuance will not fare badly. Their computation of yields on the basis of peak prices is as follows:

Debenture issue	Peak Price	Yield to Maturity	Yield to 5/1/42*
6%, due 1/1/73	104 —April 1928	5.75%	5.59%
6½%, due 5/1/74	106½—March 1928	6.10	5.85
6%, due 11/1/75	104½—April 1928	5.70	5.51

* The plan contemplates payment of interest accrued on all series to May 1, 1942. It states, however, that debenture holders will be entitled to receive payment of principal and interest so computed, in advance, at any time after three days from the date of our order herein.

nor has any such contention, or the converse, been passed upon by us in any proceeding prior to this one. The fact that we have on several occasions permitted companies to redeem securities at a premium when they desired to do so, despite the fact that they may have been in the process of dissolving at the time, obviously cannot be taken as an indication that we thought all companies under our jurisdiction are obliged to do so under all circumstances. The North American and Pennsylvania Power Cases²⁶ are not inconsistent with the conclusion reached here.

Two further points are presented for consideration. There is evidence

We wish to make it plain that we do not rest our conclusion on any such elusive considerations.

[4] Lastly, counsel for the debenture trustee argues that if the redemption provisions are held inapplicable so that the debentures are treated as being in effect noncallable, some compensation must still be given to the debenture holders for the termination of their investment. The call premium of 9 per cent is suggested as an appropriate measure of such compensation. It seems to us a complete answer to this argument that the termination of the investments of debenture holders and stockholders alike has been brought about by the act of a sovereign

²⁴ Id., footnote 74 at mimeograph p. 34.

²⁵ Id., mimeograph p. 35 (emphasis added).

²⁶ Re The North American Co. (1939) 4 SEC 434; Re Pennsylvania Power & Light Co. (1939) 5 SEC 684.

²⁷ All the debentures were originally sold to the public during the years 1923 to 1925 at 42 PUR(NS)

prices ranging between 90 and 95. From 1931 to 1940 market quotations were constantly below par reaching as low as 25 for a time in 1933. Since 1940 and especially since our order of March 20, 1941, for the liquidation and dissolution of Power, market quotations have been close to and sometime as much as 1½ points above par.

RE UNITED LIGHT AND POWER CO.

power—in this case a congressional mandate. We think the debenture holders have established no right to receive such compensation here at the expense of the stockholders,²⁸ whose rights we must also consider.

Other Provisions of the Plan

The plan provides for publication by Power of a notice of payment upon the entry of an order herein approving the plan; and for the mailing of such notice to all registered owners of debentures; it provides for an escrow agreement covering the deposit of cash by Power with a bank or trust company selected by it, preserving the right, if any, of debenture holders to receive the redemption premium in the event of judicial review of our order herein; and provides for receipts to be issued by the escrowee to debenture holders who surrender their debentures, with coupons appertaining thereto, for payment of principal and interest before final determination in the event of such review of their right, if any, to receive such premium. The plan further provides that debenture holders who surrender their debentures against payment of principal and interest will not thereby waive their right to receive the redemption premium in case it shall be finally determined on review that they are entitled to receive such premium.

The foregoing provisions, together with forms of documents submitted with the application, appear to require no adverse action or comment by us.

Conclusion

The liquidation and dissolution of Power having become necessary and

mandatory under § 11(b)(2) of the Holding Company Act; the plan proposed by Application No. 8, as submitted, being necessary to effectuate the provisions of said section and to enable Power to liquidate and dissolve in accordance with our order of March 20, 1941; the holders of the outstanding debentures of Power not being entitled to receive any premium on payment of the debentures in accordance with the provisions of the plan; and said plan being fair and equitable to the persons affected thereby; an appropriate order will issue granting said application, approving said plan as submitted, and directing Power to carry out the same according to its terms.

ORDER

The Commission having directed, by an order entered in this proceeding on March 20, 1941, pursuant to § 11(b)(2) of the Public Utility Holding Company Act of 1935, that the United Light and Power Company be liquidated and dissolved and that said company make application to the Commission for the entry of any further orders necessary or appropriate for such purpose;

Said order having further provided that said company might submit to the Commission for its approval a plan proposing a method for complying with said order, on a basis which should be fair and equitable to its security holders, and providing for a determination of the relative rights and interests of its security holders in connection therewith;

The Commission having expressly reserved in said order jurisdiction to enter such further orders in this proceeding as may be necessary or appro-

²⁸ Cf. cases cited *supra*, footnotes 18-20.

SECURITIES AND EXCHANGE COMMISSION

priate for the purpose of carrying out the steps required by said order;

The United Light and Power Company having filed an application herein designated as Application No. 8, proposing a plan for the immediate payment of its long-term debt represented by three series of debentures maturing according to their terms on January 1, 1973, May 1, 1974, and November 1, 1975, respectively;

A hearing having been held, and the Commission being fully advised in the premises and having this day issued and filed its findings and opinion herein; now therefore, on the basis of said findings and opinion, and pursuant to the applicable provisions of said act, the applicable rules thereunder, and the Commission's said order of March 20, 1941, it is

Ordered that the plan proposed by Application No. 8 be and it hereby is approved as submitted, and that said

application be and it hereby is granted subject to the terms and conditions specified in Rule U-24;

Further ordered that the outstanding debentures of each series issued by the United Light and Power Company shall become due and payable, in accordance with the provisions of said plan, on May 1, 1942, at the principal amount thereof plus accrued interest at that date, and that interest shall cease to accrue on said debentures on and after May 1, 1942;

Further ordered that the United Light and Power Company be and it hereby is authorized and directed to consummate said plan according to its terms, and as soon as practicable to submit to the Commission for its approval such further plan or plans as may be necessary or appropriate for compliance with § 11(b)(2) of said act and with the Commission's afore-said order of March 20, 1941.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Pennsylvania Public Utility Commission

v.

Edison Light & Power Company

[Complaint Docket No. 11108.]

Rates, § 640 — Procedure — Exceptions — Persons not parties.

1. An important issue raised by exceptions filed by persons not parties to a rate proceeding and, therefore, technically invalid will be considered, particularly where such exceptants have filed a reparation or refund petition, p. 208.

Rates, § 651 — Orders — Omission of refund provision.

2. An order nisi requiring a rate reduction is not objectionable because it omits an order relating to reparation, in view of the statutory authority of the Commission to order rates for the future and later to order refunds in the same or a different proceeding, p. 209.

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

Procedure, § 1 — Exceptions to order — Sufficiency.

3. An exception to a rate order alleging failure to comply with mandatory provisions of the Public Utility Law will be dismissed when no specific instance is cited to show how or where the Commission has failed to comply with the law, p. 209.

Procedure, § 1 — Exceptions to order — Sufficiency.

4. An exception to a rate order on the ground that the order is based upon matters not produced in evidence and which form no part of the record in the proceeding will be dismissed where no instances are indicated in support of this exception, while the order itself refers to findings based upon data not of record, which findings are few in number and of little consequence, p. 209.

Procedure, § 33 — Reopening of rate case — Additional testimony and evidence.

5. An exception to a Commission rate reduction order on the ground that a utility company was not afforded an opportunity subsequent to a hearing to adduce additional testimony and evidence should be dismissed in view of the rule that proceedings should not be reopened because of economic changes where such evidence was available and susceptible of production before the Commission acted, p. 210.

Valuation, § 79 — Reproduction cost determination — Evidence of prices — Changed conditions.

6. A conclusion that reproduction cost new amounted to a stated sum is not erroneous on the ground that the Commission failed to give consideration to increased costs of labor and materials occurring subsequent to a hearing date, where, after litigation, additional evidence was adduced but the utility company did not make any effort to show changes in prices of labor and materials from the dates of the original reproduction cost estimate to any subsequent date; there must be an end to litigation and records which have been closed and made the subject of an order nisi should not be reopened each year, p. 211.

Valuation, § 101 — Accrued depreciation — Observed condition.

7. Present condition estimates by engineers whose first acquaintance with the property was made after a rate proceeding was begun cannot reasonably be adopted when they conflict sharply with conclusions derived from a company's own managerial policies as to depreciation, p. 214.

Valuation, § 104 — Accrued depreciation — Depreciation reserve.

8. The depreciation reserve of a utility company must be taken as one indication of accrued depreciation, p. 214.

Valuation, § 100 — Accrued depreciation — Age and life.

9. Estimates of the age and probable life of utility property are indications of accrued depreciation, the 4 per cent compound interest and straight-line methods being two of the accepted methods considered currently in rate adjudication, p. 214.

Valuation, § 332 — Going concern value — Separate allowance.

10. An adequate allowance is made for going concern value when fair value as found represents the Commission's judgment based on the various available measures of cost and value of the property, including a consideration of intangible values, p. 217.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Valuation, § 250 — Contributions by consumers.

11. The Commission has authority to exclude from the rate base property constructed or installed with capital contributed by consumers, p. 217.

Valuation, § 36 — Rate base — Original cost as measure.

12. The Commission has legal authority to use original cost less accrued depreciation as an element of fair value, p. 218.

Valuation, § 26 — Adjustments — Accrued depreciation — Net additions.

13. Deduction of an increase in the depreciation reserve from a fair value finding and addition of the cost of net additions is required in order to give proper effect to the lessening in value due to depreciation accruing on the whole property up to the time of a rate order, p. 218.

Depreciation, § 23 — Annual allowance — Method of calculation.

14. An annual depreciation allowance based upon a considered judgment of all the facts of record, without relying solely on arithmetical calculations or any other one factor, is in accordance with legal authority, p. 220.

(BUCHANAN, Commissioner, dissents in separate opinion.)

[January 26, 1942.]

EXCEPTIONS to order nisi requiring reduction in electric rates; exceptions sustained in part and dismissed in part. For decision on order nisi, see 40 PUR(NS) 146, and for decision on petition to reopen case, see 41 PUR(NS) 41.

By the COMMISSION: By order nisi of July 30, 1941, 40 PUR(NS) 146, we terminated the above proceeding upon a finding that respondent's rates should be reduced to the extent that operating revenues would not exceed \$1,754,000, annually. In the order nisi a period of twenty days from service thereof was set within which exceptions and briefs in support of exceptions might be filed. Within this period respondent filed a petition to reopen the case to afford it an opportunity to submit further testimony and evidence with respect to (a) prices of labor and materials as of December 31, 1940, (b) observed condition of the property as of December 31, 1940, and its prospective usefulness, and (c) such other evidence as we deemed proper. The petition of respondent was refused by order dated 42 PUR(NS)

October 7, 1941, 41 PUR(NS) 41, for the reasons stated therein.

Exceptions to the order nisi were filed by respondent and by Herbert B. Cohen, attorney for Willis Ramsay and the Utility Consumers League. Argument relating thereto was held on October 6, 1941.

[1] The exceptions filed by Cohen on behalf of Ramsay and the Utility Consumers League are technically invalid, since neither exceptant nor his associates are parties to this proceeding, and therefore no right exists to file exceptions. However, the issue raised by the exceptions is important, and we will not invoke technicalities in disposing of them. Furthermore, exceptant and his associates have filed a reparation or refund petition at Complaint Docket No. 11576 (1938) 23 PUR(NS) 374, and are reason-

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

ably entitled to consideration of their exceptions.

[2] In summary, the exceptions of Cohen suggest that, if the instant proceeding is terminated without an order as to refunds or reparations under § 313(a) of the Public Utility Law, no such order can be made in the future. Exception is therefore taken to the omission from the order nisi of an order relating to reparations.

At this point it is noted that counsel for respondent, at the argument on the exceptions, specifically and emphatically disclaimed any intent either then or for the future to use this argument in opposition to refund claims or orders. Such a disclaimer is inescapable since it appears clear to us that our power under § 313(a) to order refunds "in any proceeding involving rates" is not limited to any one specific proceeding. We are of opinion that we have statutory authority to order rates for the future and later to order refunds in the same or a different proceeding (See *Stewart v. Public Utility Commission*, where an order nisi and final order deferred refund findings and the court affirmed the Commission [1939] 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447) and it has been and remains our intent to consider matters pertinent to refunds in disposing of the proceeding at Complaint Docket No. 11576, *supra*. This procedure is reasonable, appropriate, and strictly in accordance with the statutory and case law. We will therefore dismiss the exceptions filed by Cohen.

Respondent filed 23 exceptions which will be passed upon seriatim in the remainder of this order.

Exception No. 1. Respondent alleges that the entire order nisi is ar-

bitrary, unlawful, and in contravention of the first and tenth sections of the first article of the Constitution of the commonwealth of Pennsylvania.

Exception No. 2. Respondent excepts to the order nisi because the findings and conclusions therein as to the fair value of the property amount to confiscation of the property of respondent without due process of law, in contravention of the first and tenth sections of the first article of the Constitution of the commonwealth of Pennsylvania.

The validity of these two very general exceptions depends upon the validity of the detailed exceptions and will be sustained or dismissed as appears appropriate, after disposition of such detailed exceptions.

[3] *Exception No. 3.* Respondent alleges that, in the order nisi, the Commission, in determining the fair value of the property failed to comply with the mandatory provisions of the Public Utility Law of the commonwealth of Pennsylvania.

This exception will be dismissed as no specific instance has been cited to show how or where we have failed to comply with the Public Utility Law.

Exception No. 4. Respondent alleges that the conclusions and findings in the order nisi are not supported by substantial evidence in the record of the proceedings in which the order nisi was entered.

This is another general exception and is unsupported. It will be dismissed.

[4] *Exception No. 5.* Respondent alleges that the order nisi is based upon matters not produced in evidence and which form no part of the record in the proceedings.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

No instances are indicated by respondent in support of this exception. However, the order nisi itself refers to findings which were based upon data not of record. These findings were very few in number and of little consequence except as to the use of 1940 data, which were given effect to the advantage of respondent as well as its disadvantage. Respondent does not attempt to refute the correctness of these findings. The exception is of a purely technical nature and will be dismissed.

[5] *Exception No. 6.* Respondent alleges that the order nisi was entered without affording it an opportunity subsequent to June 5, 1940, to adduce additional testimony and evidence relating to the fair value of the property and to other essential matters relevant to our conclusions and which respondent further alleges it would have presented had it been afforded such an opportunity.

In the order dated October 7, 1941, *supra*, 41 PUR(NS) at p. 42, which denied the petition to reopen the case and afford respondent an opportunity to submit further testimony with respect to (a) prices of labor and materials as of December 31, 1940, (b) observed condition of the property as of December 31, 1940, and its prospective usefulness, and (c) such other evidence as the Commission deemed proper, we stated:

"Respondent recognizes that under ordinary circumstances it should have asked for further hearing prior to the issuance of the Commission order nisi of July 30, 1941, but it contends that informal negotiations with Commission representatives looking to the establishment of agreed rates coupled 42 PUR(NS)

with a sliding scale, relieved it from the obligation of timely request for the opportunity to present further evidence. We need not discuss this contention with regard to the effect of informal conferences since we are of the opinion that even if we regard the petition as properly submitted it must be refused on other grounds.

"The argument with relations to (a) is substantially the same as that presented to the Federal courts in connection with the temporary rate order of November 30, 1937, 21 PUR(NS) 328, to the effect that the Commission in that order should have given effect to an undepreciated reproduction cost estimate as of May 31, 1937. On behalf of the Commission, it was pointed out that respondent itself had not revised its fair value claim based upon 1936 reproduction cost figures in the light of the increased reproduction cost shown by the 1937 estimate. The United States Supreme Court upheld the Commission order: *Driscoll v. Edison Light & P. Co.* (1939) 307 US 104, 83 L ed 1134, 28 PUR(NS) 65, 59 S Ct 715. We perceive nothing in the present situation which should move us to reopen the proceeding at this late date for the purpose of permitting the submission of additional reproduction cost evidence. There must be an end to litigation and records which have been closed and made the subject of an order nisi should not be reopened each year.

"As will be seen from a reading of our order nisi, the Commission findings, as to depreciation, are not based upon 'observed condition' as the company uses the term to a significant extent, and therefore we perceive no justification for further hearings to per-

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

mit testimony to be presented as to the observed condition at December 31, 1940.

"It may be noted that the issues before us are also raised in respondent's exceptions to the order nisi, and we will give further careful consideration thereto in our review of the exceptions."

The Supreme Court of the United States in several relatively recent decisions refused to overrule actions of lower jurisdictions which declined to reopen proceedings under circumstances strikingly similar to those in this case. In the *St. Joseph Stock Yards Case*, the refusal of the Secretary of Agriculture, after extended hearings over stockyards rates, to reopen the proceedings a second time because of economic changes was held not to be erroneous if the rates prescribed were not confiscatory. (1936) (298 US 38, 47, 49, 80 L ed 1033, 14 PUR(NS) 397, 56 S Ct 720). No abuse of discretion was found to be involved in the Interstate Commerce Commission's denial of a rehearing in a rate proceeding sought for the purpose of introducing evidence as to changed economic conditions after the closing of the evidence, where such evidence was available and susceptible of production before the Commission acted: *United States v. Northern P. R. Co.* (1933) 288 US 490, 77 L ed 914, 53 S Ct 406. The United States circuit court of appeals, in *Florida Power & Light Co. v. Miami* (1938) 98 F(2d) 180, 25 PUR(NS) 321, said a court is warranted in refusing to reopen a rate case for the introduction of proof by the public utility company when the company fails in diligence by presenting the evidence only

after the decision has been announced. Accordingly, Exception No. 6 will be dismissed.

[6] *Exception No. 7.* Respondent excepts to the conclusion in the order nisi that the reproduction cost new of the property as of December 31, 1936, adjusted to December 31, 1939, amounted to \$5,758,375, alleging that we failed to give any consideration therein to the increased costs of labor and materials occurring subsequent to November 30, 1936. Respondent asserts: (1) that such finding is not, in law or fact, a finding of reproduction cost because we failed to give any weight therein to the increased cost of labor and materials between November 30, 1936, and December 31, 1939; and (2) that we failed to make any finding of reproduction cost new of the property as of December 31, 1940, and that such a finding is necessary to a proper and lawful determination of the fair value as of that date.

The temporary order sustained by the Supreme Court of the United States in April, 1939 (307 US 104, 83 L ed 1134, 28 PUR(NS) 65, 59 S Ct 715) was issued by us on November 30, 1937, 21 PUR(NS) 328. The findings therein were partly based on respondent's reproduction cost estimate as of November 30, 1936. Upon resumption of hearings after the Supreme Court's decision, additional evidence was adduced on behalf of respondent and the Commission. The last hearing was held on June 5, 1940, and the record closed.

At none of the 1939 and 1940 hearings did respondent, which was represented by legal and technical personnel, make any effort to show changes in prices of labor and materials, from

PENNSYLVANIA PUBLIC UTILITY COMMISSION

the dates of the original reproduction cost estimate, to December 31, 1939, or any subsequent date, despite the fact that at these hearings full opportunity was allowed for the presentation of evidence having a bearing on the determination of reasonable rates. Although the burden of proof was upon respondent, it was not until after the issuance of the order nisi dated July 30, 1941, 40 PUR(NS) 146, that respondent expressed any desire to present evidence relating to price changes.

As we said in our order dated October 7, 1941, *supra*, 41 PUR(NS) at p. 42, disposing of respondent's petition for rehearing: "There must be an end to litigation and records which have been closed and made the subject of an order nisi should not be reopened each year."

Exception No. 7 will be dismissed.

Exception No. 8. Respondent excepts to the statement on page 12 of the order nisi that: "Of the \$4,919,635 which represents respondent's actual investment in property, the sum of \$2,339,880 or 47.6 per cent has been recovered by provision for depreciation in the rates charged consumers." (40 PUR(NS) at p. 153.) Respondent alleges (1) a lack of evidence that \$4,919,635 represents actual investment in property and (2) that the conclusion with respect to the recovery of \$2,339,880, has no legal relevancy to a determination of the fair value of the property.

Respondent's contention that the sum of \$4,919,635 does not represent actual investment, is academic. The facts of the matter are that two exhibits were entered of record—one by respondent, the other by the Commis-

sion staff—showing the cost of the property, as developed from separate analyses of respondent's books. These exhibits covered the entire period of construction by respondent and its predecessors from 1886 to 1936, inclusive. As shown by the temporary order dated November 30, 1937, *supra*, 21 PUR(NS) at p. 334 (17 Pa PUC 380 at 387) respondent's analysis, which was entitled "Summary statement showing gross additions and retirements by years as abstracted from the books of accounts of the respondent and predecessor companies and as adjusted for the elimination of net excess values created in connection with the revaluation of plant and property of predecessor companies and other accounting adjustments—status as at December 31, 1936," was within one seventeenth of one per cent of the Commission's estimate of original cost. The temporary order further shows respondent's estimate of original cost as of November 30, 1936, exclusive of the item of cost of financing, in an amount within one per cent of the other two estimates.

The contention that our conclusion with respect to the recovery of the sum of \$2,339,880, for depreciation has no legal relevancy to a determination of the fair value, is wholly untenable as can be seen from the following excerpt from the opinion of the Supreme Court of the United States in *Lindheimer v. Illinois Bell Teleph. Co.* (1934) 292 US 151, 168, 169, 78 L ed 1182, 3 PUR(NS) 337, 347, 348, 54 S Ct 658:

"While property remains in the plant, the estimated depreciation rate is applied to the book cost and the resulting amounts are charged current-

ly as expenses of operation. The same amounts are credited to the account for depreciation reserve, the 'Reserve for Accrued Depreciation.' When property is retired, its cost is taken out of the capital accounts, and its cost, less salvage, is taken out of the depreciation reserve account. According to the practice of the company, the depreciation reserve is not held as a separate fund but is invested in plant and equipment. As the allowances for depreciation, credited to the depreciation reserve account, are charged to operating expenses, the depreciation reserve invested in the property thus represents, at a given time, the amount of the investment which has been made out of the proceeds of telephone rates for the ostensible purpose of replacing capital consumed. If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment upon which the utility expects a return."

Exception No. 8 will be dismissed.

Exception No. 9. Exception is taken to the conclusion on page 15 of the order nisi that observed depreciation

as determined by respondent is not of sufficient reliability to warrant giving substantial weight thereto in making a finding of fair value. Respondent indicates that our statements regarding failure to consider obsolescence, inadequacy, or other factors not observable by inspection are incorrect, and points to transcript references intended to show where these factors were considered. There is some merit to this contention; however, further analysis of the question as a whole tends to strengthen our conclusion that the observation results are wide of the mark and should be given little or no weight in the fair value determination.

In this case, separate observations were made by a group of engineers representing respondent and a group from the Commission's staff. Respondent's engineers made use of the observations by applying a percentage of condition to the property while our engineers, under the direction of H. Root Palmer, made use of their inspection to estimate probable life. In the order nisi, accrued depreciation was determined by two methods of calculation, namely, straight line and 4 per cent compound interest. In general, the methods of observation employed by respondent's engineers were related in the order nisi by quoting the testimony of Messrs. Seelye and Mitchell. At this point we deem it desirable to outline in general the scope and care of the inspections made by Palmer and his assistants. The steps pursued are summarized as follows:

1. A field investigation was made to observe the kind and class of facilities used, the present condition, the

PENNSYLVANIA PUBLIC UTILITY COMMISSION

standard of maintenance, the character of the territory served, the probabilities of increased demands, and the remaining life expectancy under these conditions.

2. Two Commission engineers were assigned to the field work under Palmer's direction.

3. The field work on respondent's property covered several months.

4. The following is an example of the extent of inspection:

The poles of two of the eleven transmission lines radiating out from the city of York were tested 100 per cent. The remaining nine lines were checked by selecting poles at random. In the city of York one or more poles were selected in a large portion of the city blocks, tests made of wood and iron poles, and their condition observed.

5. The field work was tabulated and used as a basis for estimating the life of the facilities.

6. Palmer reviewed the field work as tabulated, and selected at random 60 of the 629 poles inspected and personally checked the work of the field staff. At the same time he personally studied the territory, the nature and class of consumers, the probability of increased growth, and other factors which would affect the useful life of the facilities. Consideration of these factors in connection with the type of construction, class of material used, standard of maintenance, methods of operation, condition of facilities, and average age of the units of the groups of property were the bases for the life estimates.

In addition to the foregoing studies relating primarily to the determination of probable life, Palmer made various studies of respondent's property, with

particular regard to the facilities used to generate steam and electricity, and has submitted exhibits in this case relative thereto.

[7-9] On the one hand, we have testimony from a group of engineers for respondent whose first acquaintance with the property was made after this proceeding was begun and, on the other, testimony from a Commission engineer whose knowledge of the property and territory was not only acquired from studies made in this case, but also from knowledge and experience gained during a period predating the case. We cannot reasonably be expected to adopt present-condition estimates, such as those submitted by respondent, when they conflict sharply with conclusions derived from respondent's own managerial policies, which certainly must have been based largely on experience, and with results based on careful life and age estimates.

As related in the order nisi, respondent's depreciation reserve was equal to 47.6 per cent of the investment in the property. This must be taken as one indication of accrued depreciation. Other indications may be based upon the use of estimates of the age and probable life of the property. The 4 per cent compound interest and straight-line methods are two of the accepted methods and are considered currently in rate adjudication by this and other regulatory bodies. In the order nisi, depreciated cost estimates were shown based on the application of these two methods to the cost new figures and by the utilization of Palmer's ages (as adjusted) and lives.

The record includes estimates of reproduction cost less accrued deprecia-

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

tion as prepared by Day & Zimmerman, as of two dates, namely, June 30, 1934 and November 30, 1936, an interval of two years and five months. The accrued depreciation in each case was based on observation. The ratios of the observed depreciation to the reproduction cost new figures for depreciable property in these appraisals are as follows:

June 30, 1934	11.33%
November 30, 1936	12.83%

The property in the 1936 estimate was basically the property in the 1934 estimate, as the additions and retirements in the interim were quite small in relation to the property as a whole. Yet, in a period of two years and five months, depreciation on that property was said to amount to only $1\frac{1}{2}$ per cent, indicating an annual rate of about $\frac{5}{8}$ of 1 per cent. This rate applied to reproduction cost new of depreciable property amounting to \$5,448,674 would result in annual depreciation of only \$34,054. Furthermore, $\frac{5}{8}$ of 1 per cent on the cost new would presuppose a total property life of 160 years on a straight line basis. Respondent would certainly not concede that an allowance of \$34,054 for annual depreciation would be proper and, in fact, has taken Exception (No. 21) to an allowance in the order nisi of \$128,000, as being insufficient.

The 1934 and 1936 appraisals reveal specific instances where the observation method of determining accrued depreciation produced inconsistent results. These appraisals were prepared by the same engineering firm and, for this reason, any inherent weakness in the method used could reasonably be expected to be mini-

mized. Different firms might have widely varying conclusions as to observed depreciation of property units, but it is not to be expected that the same firm, making its observations within a two-year-and-five-month period, could possibly derive such contradictory results as were derived in this case. Three property accounts reflecting the reproduction cost of structures, in which there were only slight physical changes during the period from June 30, 1934, to November 30, 1936, are set forth below, together with the accrued depreciation applied thereto by the engineers and the ratio of such accrued depreciation to cost new:

	June 30, 1934	Nov. 30, 1936
Steam Generating Structures:		
Reproduction cost new ...	\$225,111	\$221,898
Accrued depreciation (observed)	34,111	7,398
Ratio of depreciation to cost new	15.15%	3.33%
Transmission System Structures:		
Reproduction cost new ...	23,394	22,613
Accrued depreciation (observed)	1,194	336
Ratio of depreciation to cost new	5.10%	1.49%
General Office Structures:		
Reproduction cost new ...	110,333	110,505
Accrued depreciation (observed)	27,833	16,576
Ratio of depreciation to cost new	25.23%	15.00%

Respondent's calculations, as submitted in support of Exception No. 11, reflect the following ratios for accrued depreciation of depreciable property, as compared with Day & Zimmerman's estimates of observed depreciation of 11.33 per cent and 12.83 per cent in the 1934 and 1936 reproduction cost estimates, respectively:

PENNSYLVANIA PUBLIC UTILITY COMMISSION

	Accrued
Reproduction Cost:	
Straight line	33.6%
4% Compound interest	20.5%
Original Cost:	
Straight line	31.7%
4% Compound interest	19.4%

The foregoing percentages, together with a consideration of the depreciation reserve, all of which are respondent's creations, clearly reveal the unreliability of the observed depreciation estimates made by respondent's engineers. As if this were not enough, the two estimates dated June 30, 1934, and November 30, 1936, are so contradictory as to render them both of very doubtful value from a depreciation standpoint. Accordingly, Exception No. 9 will be dismissed.

Exception No. 10. Respondent asserts that in the treatment or determination of accrued depreciation, we failed to give any weight to the observed condition and present and prospective usefulness of respondent's property.

In disposition of Exception No. 9, we considered the question of the weight to be given observed condition. We gave full consideration to the present and prospective usefulness of respondent's property in the order nisi and will do so in this order. Therefore, this exception will be dismissed.

Exception No. 11. This exception refers to Table G in the order nisi, which shows original cost and reproduction cost of the property and related depreciation findings, respondent alleging (1) that the findings are erroneous and (2) that the Commission's action in reaching its findings as to annual and accrued depreciation without giving any weight to the ob-

served physical condition of respondent's property is unreasonable and improper. The exception as it refers to the former will be sustained and the necessary corrections will be made in our later calculations. The exception as it relates to the question of observed depreciation will be dismissed for the reasons given under Exception No. 9.

Exception No. 12. Respondent asserts that our conclusion that the depreciation reserve is evidence relating to accrued depreciation has no legal relevancy to a proper determination of accrued depreciation for the purpose of fixing a rate base. We will dismiss this exception for the reasons stated under Exception No. 8.

Exception No. 13. Respondent accepts to the allowance of \$101,000 for cash working capital and materials and supplies, in the separate amounts of \$51,000 and \$50,000, respectively. It is asserted by respondent: (1) that the Commission erred in stating that "a period of approximately ten days is allowed for consumers to pay without incurring a penalty"; and (2) that the reasoning in the order nisi in support of the allowances made is refuted by the actual experience of respondent. As to the former, the exception will be sustained. This action will have no effect on our allowance as respondent's own calculations, presented at argument, are based on a lag of forty-five days from beginning of service to payment therefor, the precise period used in the order nisi. However, due to the use of 1940 operating expenses, instead of 1939, as used in the order nisi we will increase our allowance for cash working capital to \$53,000.

Our allowance for materials and

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

supplies of \$50,000 was based upon the actual material and supplies inventory at December 31, 1939, which amounted to \$50,360. Respondent now appears to contend that an allowance for this item should be based on the inventory at August 31, 1941, which amounted to \$118,382. This amount is more than double the balances of \$56,293 at December 31, 1940, \$50,360 at December 31, 1939, and \$45,526 at December 31, 1938. Whether the increase in 1941 is due to accumulations of materials for a construction program, seasonal fluctuations, higher price levels, or any of them, has not been explained. Therefore, the 1941 figures cannot reasonably be considered. However, we will increase our allowance to \$56,300 which is based on materials and supplies inventory at December 31, 1940.

Exception No. 13 will be sustained to the extent that our total allowance will be increased to \$109,300. It will be dismissed, however, in so far as it pertains to the basic reasoning by which the allowance was determined in the order nisi.

[10] *Exception No. 14.* Respondent contends that we failed to make an adequate allowance in the fair value of the property for going concern value. The fair value finding represented our judgment based on the various available measures of cost and value of the property, including a consideration of intangible values. We are of the opinion that reasonable provision for going concern value was made and we will dismiss Exception No. 14.

[11] *Exception No. 15.* Respondent asserts that we are without legal authority to exclude from the rate

base property constructed or installed with capital contributed by its consumers and excepts to our consideration of \$218,368 of such capital in determining fair value.

In the Duquesne Light Company Case [Pa 1937] (20 PUR(NS) 1) and Abington Electric Company Case [Pa 1939] (28 PUR(NS) 257) deductions were made by us for contributed or donated capital. The Pennsylvania superior court, in passing on this question in 1921, said in disposing of an appeal by the Beaver Valley Water Company:

"If these lines were to be reproduced at this time the company would be required to pay for the installation of the service lines at the cost claimed by appellant, but when these lines were laid the cost of installing the service lines was paid by the consumers, and the company's title to them has not been established in this record; and therefore were this cost included in the reproduction cost new a *corresponding deduction would have to be made in determining the present value of the appellant's property for rate-making purposes. It admittedly expended none of this money and is not entitled to a fictitious credit therefor.*" (76 Pa Super Ct 255, 264.) (Italics supplied.)

See also Matamoras Citizens Water Co. v. Public Service Commission (1925) 86 Pa Super Ct 152, 154, 155.

Exception No. 15 will be dismissed.

Exception No. 16. Respondent excepts to all of the conclusions of the Commission with respect to fair value and, particularly, to the conclusions on page 26 that:

(a) The fair value at December 31, 1939, is \$3,800,000.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

(b) Original cost less accrued depreciation, as distinguished from undepreciated original cost, is a proper element of fair value.

(c) The use of the book cost less book reserve for depreciation is a proper element of fair value.

(d) The allowance of \$101,000 is adequate for working capital.

(e) The deduction from the fair value of the purported "donated capital" of \$218,368 is lawful.

(f) The computations with respect to accrued depreciation on both the straight-line and 4 per cent compound interest methods represent either proper or accurate determination of accrued depreciation.

We have already covered under exceptions (8), (11), (13), and (15), the points raised under (c), (f), (d), and (e) respectively. As we sustained in part the contentions of respondent under exceptions (11) and (13), which relate to depreciated cost on various bases and working capital, respectively, the exception under (a) above must also be sustained and a new fair value finding as of December 31, 1939, will be made.

[12] Respondent, under (b) above claims that we are without legal authority to use original cost less accrued depreciation as an element of fair value. Our findings in the temporary order issued on November 30, 1937, 21 PUR(NS) 328, which were in part based on consideration of depreciated original cost, were sustained by the Supreme Court of the United States: *Driscoll v. Edison Light & P. Co.* (1939) 307 US 104, 83 L ed 1134, 28 PUR(NS) 65, 59 S Ct 715. This portion of Exception No. 16 will be dismissed.

42 PUR(NS)

In view of the exceptions filed with regard to the respective elements of fair value and our analysis of their merit, we will consider the following revised amounts:

Reproduction cost new less accrued depreciation:	
Straight-line method	\$3,926,804
4% Compound interest method ..	4,640,878
Original cost less accrued depreciation:	
Straight-line method	3,482,546
4% Compound interest method ..	4,072,477
Book cost less reserve for depreciation	
Working capital	109,300
Going concern value	No separate allowance
Donated capital—credit	218,368

Upon consideration of the above-revised depreciated cost figures, as of December 31, 1939, we will sustain respondent's exception to the fair value finding of \$3,800,000 in the order nisi. We will now allow \$3,925,000 as the fair value of the property used and useful in the public service, after giving to each of the elements such weight as appears fair and reasonable.

[13] *Exception No. 17.* Respondent takes exception to our conclusion on page 47 of the order nisi, *supra*, 40 PUR(NS) at p. 177, that:

"During the year 1940, net additions to utility plant amounted to \$276,819.99 and the net increase in reserve for depreciation of utility plant was \$141,952.70, thus indicating an increase of \$134,967 in the fair value finding."

Respondent asserts that our method of determining the fair value of the property at December 31, 1940, was erroneous in that (a) it failed to give any consideration to the increase in prices of labor and materials between November 30, 1936, and December

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

31, 1940, and (b) in determining the net additions to respondent's plant and property constructed or installed between December 31, 1939, and December 31, 1940, we improperly deducted respondent's net increase in book reserve for depreciation in the sum of \$141,952.70 from the actual net additions made during said period at a cost of \$276,819.99. The question raised by item (a) has been disposed of herein under Exception No. 7.

As to item (b) respondent apparently seeks to create the impression that deduction of the increase in the depreciation reserve from the net additions of \$276,819 was an indication that these net additions had depreciated to the extent of \$141,952 to December 31, 1940. Such is not the case. The fair value finding in the order nisi applied to the entire used and useful property and was determined from a consideration of the appropriate depreciated cost figures at December 31, 1939. The recorded provision for annual depreciation in 1940, resulted in an increase in the reserve of \$141,952, substantially all of which necessarily related to the property at the beginning of 1940. Therefore, the effect of our procedure was deduction of the increase in the reserve from the fair value finding and addition of the cost of net additions. This procedure is obviously required in order to give proper effect to the lessening in value due to depreciation accruing on the whole property in 1940.

Exception No. 17 will be dismissed.

Exceptions Nos. 18 and 19. Exception No. 18 relates to the price at which respondent sells steam to its affiliate, York Steam Heating Company. For

a number of years the price has been 42½ cents per thousand pounds condensation, which in the order nisi we found to be noncompensatory to respondent. We found a price of 52 cents to be reasonable. Respondent makes valid exception to this finding. However, at oral argument respondent agreed to a price of 46 cents. After further analysis, we are of the opinion this price is reasonable. Accordingly, Exception No. 18 will be sustained and the credit for steam transferred will be adjusted to a price of 46 cents.

Exception No. 19 relates to the elements of return and depreciation aggregating \$30,000, included by us in the order nisi as part of the cost of producing steam. Owing to our allowance of 46 cents for steam transferred, it will not be necessary to pass on Exception No. 19.

Exception No. 20. Respondent excepts to the allowance of \$3,600, annually, for distribution rents, of which \$3,402 covers rental of property of York Railways Company, an affiliate of respondent. In the printed exceptions, respondent claims an allowance of \$11,500, but at oral argument, the claim was reduced to \$4,744. Respondent asserts that the allowances for the following four items should be increased to the extent shown:

	Allowed	Claimed
Right of way between Smysers and Gitts Run substation ..	\$545	\$844
Poles on right of way between Violet Hill and Dallastown	394	656
Poles on right of way between Smysers and Gitts Run substation	336	560
Trolley poles in York and various boroughs	835	1,392

In the order nisi, we adopted Palmer's estimates of reasonable rentals, which were based upon the application

PENNSYLVANIA PUBLIC UTILITY COMMISSION

of certain percentages to cost estimates of the property involved. For the first item a 6 per cent return on the estimated reproduction cost of the line attributable to respondent's use, or \$9,080, was the basis of the \$545 allowed. The total reproduction cost of the right of way was estimated at \$14,071, but Palmer excluded \$4,991 on the ground that part of it was used by Metropolitan Edison Company, an affiliate of respondent. Respondent contends that Metropolitan put its lines along this right of way mainly to provide a high voltage transmission line for the purpose of supplying a customer of respondent at Spring Grove, and that for this reason the 6 per cent return should have been applied to the total reproduction cost of \$14,071 with a resultant allowable rental of \$844. No evidence is cited to support this contention. Palmer's evidence, which fully explains the actual use of the right of way and the method by which the rental of \$545 was determined, remains uncontradicted and we will adhere to this figure as a reasonable rental.

The contentions with regard to the remaining three items are related to our application of a 6 per cent return, exclusive of an allowance for depreciation, to the reproduction cost of the property. Respondent claims that 10 per cent should be allowed, 6 per cent for return and 4 per cent for depreciation. In connection with this claim, it would appear that many poles have been replaced by respondent and have been recorded on its books, and that many more have been marked for replacement by respondent. It is evident, therefore, that eventually all of the poles on the rights of way on

which they are located, will be the property of respondent.

In view of the foregoing, we are of the opinion that our allowances for pole rentals are reasonable.

Exception No. 20 will be dismissed.

[14] *Exception No. 21.* Respondent excepts to our conclusion in the order nisi that \$128,000 is a proper allowance for annual depreciation.

As a further result of sustaining Exception No. 11 as it related to the determination of depreciated original cost, depreciated reproduction cost and annual depreciation, we will revise the finding for annual depreciation accordingly. The figures now available for consideration are as follows:

Calculated Annual Depreciation

Reproduction Cost:	
4% Compound interest method ...	\$123,115
Straight-line method	164,429
Original Cost:	
4% Compound interest method ...	110,990
Straight-line method	150,259

Consideration of these figures in conjunction with annual book provisions for depreciation, which amounted to \$135,358 in 1939 and \$165,171 in 1940; and including an allowance for depreciation on property installed in 1940, leads us to conclude that a reasonable allowance for annual depreciation is \$145,000.

Respondent asserts that the method by which our allowance in the order nisi was computed is unlawful. The order nisi stated, 40 PUR(NS) at p. 174: "We base this (the allowance) upon our considered judgment of all the facts of record and have not relied solely on arithmetical calculations or any other one factor." We have also applied our judgment in this order to all the facts and based our conclusion thereon in making an

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

allowance of \$145,000. This procedure is exactly that suggested by the superior court in *Solar Electric Co. v. Public Utility Commission* (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 303, 9 A(2d) 447, in the words: "In our opinion a much fairer result will be obtained if the Commission gives consideration to different methods of calculating depreciation before reaching a final result, for there are advantages and disadvantages, as we have pointed out in the employment of the sinking-fund method."

Exception No. 22. Respondent expects to an allowance of \$200,000 for annual tax requirements and asserts that the allowance should be not less than \$235,000 assuming that the order nisi is valid and enforced. Respondent further asserts that \$235,000 will be insufficient in the event the reduction in rates specified in the order nisi is modified. In view of the modifications already made and increased Federal tax rates under the Revenue Act of 1941, the allowance for taxes must be increased. Based on a consideration of these factors, we will allow \$261,600 for the annual tax liability, made up as follows:

Federal Income	\$100,300
State Income	16,900
Federal Capital Stock	9,500
State Capital Stock	15,000
Federal Electric Energy	36,800
State Gross Receipts	36,800
Local Gross Receipts	28,300
General Assessment—Public Utility Commission	3,000
Federal Pensions	3,400
Federal Unemployment Relief	1,000
State Unemployment Relief	9,100
Miscellaneous	1,500
	<hr/>
	\$261,600

Exception No. 22 will be sustained.

Exception No. 23. This is a general exception and refers to the con-

clusion and order appearing on pages 49 and 50 of the order nisi, 40 PUR(NS) 146. Respondent asserts that compliance therewith would require it to file, post, and publish tariff schedules designed to yield gross operating revenues that would constitute less than a fair return upon the fair value of the property used and useful in the public service as of December 31, 1940. The order nisi allowed respondent to charge rates yielding \$1,754,000, annually. Due to the modifications herein made of fair value, annual depreciation, taxes, and the price of steam sold to York Steam Heating Company, we will order respondent to file rates designed to yield not more than \$1,839,540, annually, determined as follows:

6% Return on \$4,060,000 (\$3,925,000 as of December 31, 1939, plus \$135,000 attributable to property betterments and depreciation recorded in 1940	\$243,600
Annual depreciation, including provision applicable to 1940 additions to property	145,000
Taxes	261,600

Operation and Maintenance:

Production	
Operation	\$139,567
Maintenance	16,000
Rents	30
Steam transferred credit	118,509 Cr
Total Production	37,088
Power purchased	743,380
Transmission	9,256
Distribution	98,839
Customers accounting and collecting	72,522
Sales promotion	29,148
Administrative and general, including \$19,291 for regulatory Commission expenses	169,884
Merchandising and jobbing	29,223
	<hr/>
	1,189,340

Total Allowable Operating Revenues\$1,839,540

The operating revenues of respondent amounted to \$2,150,786 in 1940,

PENNSYLVANIA PUBLIC UTILITY COMMISSION

or \$311,246 in excess of the determined allowable operating revenues of \$1,839,540. However, on October 15, 1941, respondent made effective new rates designed to cause a revenue reduction of \$205,000, annually. Accordingly, a further reduction of approximately \$106,000 is in order.

Our reanalysis of the record in the light of respondent's exceptions develops that respondent is entitled to receive annual gross operating revenues of not more than \$1,839,540, annually; therefore,

Now, to wit, January 26, 1942, it is *ordered*:

1. That the exception of Cohen and his associates be and is hereby dismissed.

2. That the exceptions of respondent be and are hereby sustained to the extent (1) that the fair value be increased \$125,000 over the finding in the order nisi; (2) that the steam transferred credit to operating expenses be adjusted to a price of 46 cents for steam sold to York Steam Heating Company; (3) that the provision for annual depreciation be increased \$17,000 over the \$128,000 found in the order nisi; (4) that the allowance for taxes be increased \$61,600; and that the allowable annual revenues due to these revised findings, be increased to \$1,839,540, and that the order nisi of July 30, 1931, *supra*, be and is hereby amended accordingly.

3. That the exceptions of respondent be and are hereby dismissed in all other respects.

4. That the order nisi of July 30, 1941, as modified herein, be and is hereby made the final order in this proceeding.

5. That, within forty-five days of

service of this order, Edison Light and Power Company, respondent, shall file, post, and publish tariff schedules designed to yield gross operating revenues amounting to not more than \$1,839,540, annually.

6. That, within twenty days of service of this order, respondent shall submit to the Commission for review, and adjustment if necessary, the rates proposed to be filed in compliance with paragraph 5 hereof.

7. That, upon compliance with order paragraphs 5 and 6, this proceeding is terminated and the record marked closed.

Commissioner Buchanan files a dissenting opinion.

BUCHANAN, Commissioner, dissenting: The Edison Light and Power decision will remain a landmark in regulatory history in Pennsylvania because the progress of the case represents some of the high and low marks in regulation in this state.

The huge sums of money spent by the company and the holding company in the prosecution of this case in efforts to influence the Commission and the courts in decisions and the successful resistance of such approaches so that final decision was made on the merits is an important thing in the case.

Edison Light and Power serves a territory which contains practically one class of consumers, primarily, domestic; secondarily, commercial. There is very little large power consumption in its lines. The important part of this condition is that, coupled with the type of consumer consumption, it has the lowest rates in the state. This substantiates the fact that

PENNSYLVANIA PUB. UTIL. COM. v. EDISON LIGHT & P. CO.

the domestic and commercial customers are the backbone of every electric utility rate structure and are entitled to greater recognition in rate reduction than they have heretofore received.

Another point here developed is that the falsity of the "fair value" theory of rate making is completely revealed by a finding of "fair value" in this case on the basis of "reconstruction cost new less depreciation" and this in face of the known low cost of money.

It is significant that in the order nisi, "reconstruction cost new less depreciation" on a straight-line basis was found to be \$3,790,000 and "fair value" was found to be \$3,800,000. In the final order, "reconstruction cost new less depreciation" on the straight-line method was increased to \$3,926,804 and a new "fair value" of \$3,925,000 was found by the majority. In other words, the value upon which rates are to be calculated and charged to the consumer is the cost of reconstructing the property today less depreciation—almost \$4,000,000. With such a finding and such a theory, I am in complete disagreement. There is no stability, reasonableness or justice in either the finding or the theory.

In this connection it is significant that the net value of the same property as carried on the books of the company is \$2,579,755 and that the original cost of the property less accrued depreciation on the straight-line method as found by the Commission is \$3,-

482,546 but the new rates will not be determined by the values on the company's books nor on what the company has invested in the property but on what it would cost to reproduce the property today.

As noted above, this company presently has the lowest domestic rates in Pennsylvania. Rates based upon the highest "fair value" means that further reductions resulting from this order will be the least possible reduction on the basis of the facts found. Carrying that on to the ultimate, any comparison between the domestic and commercial rate schedules of Edison Light and Power on the one hand and other electric utilities in Pennsylvania will be consequently less glaring. In the latter respect, this case is not unlike the Solar Electric Company Case (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447.

Following the order nisi and prior to this order, the company filed a new tariff reducing rates and its revenues to approximately the level directed in the majority opinion in this order, consequently, there will be very little, if any, further reduction in rates or revenues produced by the final order.

So the electric industry will gain through the absence of a more glaring comparison in domestic and commercial schedules; the people of York lose a reduction which, I believe, should be made to them, and the company is faced with another rate case some time in the future.

WISCONSIN PUBLIC SERVICE COMMISSION

WISCONSIN PUBLIC SERVICE COMMISSION

Re Boscobel Telephone Company

[2-U-1777.]

Expenses, \$ 95 — Estimates — Future traffic expense.

1. An allowance for future traffic expense was based in part on the assumption that a telephone company would employ an additional operator for the coming year, p. 226.

Return, \$ 111 — Telephone company.

2. A return of 5.9 per cent was held to be reasonable for a telephone company, p. 227.

[December 30, 1941.]

APPPLICATION for authority to increase telephone rates;
granted.

By the COMMISSION: The Boscobel Telephone Company, operating as a public telephone utility in and near the village of Boscobel, Grant county, filed an application with the Commission on October 18, 1941, for authority to increase its rates. A notice of investigation and hearing was issued on October 23rd.

APPEARANCES: Boscobel Telephone Company, by Charles A. Blair, Secretary and General Manager, Boscobel, and Joseph E. Byrne, Auditor, Madison.

Intervenor in support of application: Peoples Telephone Company of Mt. Hope by Edward B. Morse, Secretary-treasurer, Mt. Hope.

In opposition: Fennimore Telephone Company, by G. L. Rowdon, Manager, Fennimore, Edward F. Kraul, President, Fennimore, and George Martin, Director, Boscobel.

The application in this proceeding was filed because the applicant company felt that its existing rates do not provide a fair return upon the value of its property devoted to public use.

42 PUR(NS)

Present and proposed monthly rates for principal classes of service are as follows:

Class of Service	Present		Proposed	
	Gross	Net	Gross	Net
Business				
1-party	\$2.00	\$1.75	\$2.75	\$2.50
2-party	1.75	1.50	2.25	2.00
Extension telephone		.60		.75
Residence				
1-party	1.75	1.50	2.25	2.00
2-party	1.50	1.25	2.00	1.75
4-party	1.25	1.00	1.50	1.25
Extension telephone		.50		.50
Rural business				
Multiparty, per quarter	6.00	5.25	6.00	5.25
Rural residence				
Multiparty, per quarter	5.25	4.50	5.25	4.50
Switched service stations, per year ...		4.25		6.00

The applicant also proposes to establish a toll rate on calls between Boscobel and Wauzeka. No charge is effective at the present time.

As of June 30, 1941, the applicant was rendering service to 786 company subscribers and 189 switched service stations located in Boscobel, Mt. Zion, and surrounding rural territory. Central offices are located at Boscobel and Mt. Zion.

The applicant has submitted data in-

RE BOSCOBEL TELEPHONE CO.

dicating recent and anticipated costs of operation. In table I is an income statement for 1939 and 1940, together with the applicant's estimate of future revenues and expenses.

which we believe should be reduced to not more than \$100, estimated total operating revenues apparently reasonably reflect the revenue which the applicant might expect to receive from

TABLE I

<i>Operating Income</i>	1939	1940	Estimated
Local service revenues	\$9,953.46	\$12,298.46	\$16,574.04
Toll service revenues	3,655.94	4,234.30	5,671.96
Miscellaneous revenues	23.17	82.51	100.00
Subtotal	\$13,632.57	\$16,615.27	\$22,346.00
Uncollectible revenues (dr)	52.00	33.90	50.00
Total Operating Revenues	\$13,580.57	\$16,581.37	\$22,296.00
<i>Operating Expenses</i>			
Maintenance expense	\$1,648.15	\$1,068.95	\$2,751.00
Traffic expense	4,018.74	4,808.41	5,867.40
General expense	4,456.98	4,214.99	6,392.46
Subtotal	\$10,123.87	\$10,092.35	\$15,010.86
Depreciation expense	1,495.70	1,787.32	3,058.30
Taxes	918.24	1,402.64	1,739.58
Total Operating Expense	\$12,537.81	\$13,282.31	\$19,808.74
Net Operating Income	\$1,042.76	\$3,299.06	\$2,487.26

Because of the wide differences in actual revenue and expenses in 1939, 1940, and the estimate as submitted by the applicant, the reasonableness of the estimates of future revenues and expenses have been examined in detail.

The increase in local service revenues in 1940 over 1939 reflects the acquisition of some 180 subscribers from the former Crawford County Telephone Company (Docket 2-U-1555). The estimated increase for the future reflects the application of the proposed increased rates to the number of customers connected for service as of June 30, 1941. The amount of estimated toll service revenues has been determined by multiplying the revenue received during the first six months of 1941 by 2 and adding \$365 as additional revenue that would be received by application of the proposed toll rate on calls between Boscobel and Wauzeka. Except for this latter amount,

the application of the proposed increased rates.

The reduction in maintenance expense in 1940 as compared with 1939, despite an increase in customers, results because maintenance employees were largely engaged in rehabilitating the recently acquired property. Time of such employees normally charged to maintenance expenses was charged to the construction or capital accounts. In estimating future maintenance expense of \$2,751, the applicant has endeavored to fix this cost of operation at a more normal level after giving consideration to the total number of stations that must be maintained in the future. The estimated amount equals \$3.50 per station per year. For the five years, 1935 to 1939, inclusive, which may be considered as normal maintenance years, the average expense per station was \$3.50 per year. Telephone utilities of this size gen-

WISCONSIN PUBLIC SERVICE COMMISSION

erally experience maintenance costs in excess of \$3.50 per station per year. Under the circumstances we consider the applicant's estimate to be reasonably conservative.

[1] Traffic expense in 1940 reflects the additional cost of operating the recently acquired Mt. Zion exchange. The estimated future expense was arrived at by multiplying the actual expenditures for the first six months of 1941 (\$2,621.70) by two (\$5,243.40) and adding \$624 as the cost of employing an additional operator. We believe that the estimate of \$5,867.40 may reasonably be used as future traffic expense provided the applicant employs an additional operator. Since our decision herein is based on such traffic expense, it is assumed that the applicant company will employ an additional operator starting in 1942.

The general expenses of the applicant in 1939 and in 1940 are approximately the same. However, the estimated future general expense which is \$2,177 in excess of actual expenditures in 1940 requires careful analysis and consideration. Of the total proposed increase, \$140 is for increased salaries to officers of the company other than the secretary and manager. It is proposed to increase the salary of the secretary and manager \$600 per year and of the bookkeeper and cashier \$120 per year and to employ a part-time extra clerk at an estimated cost of \$300 a year. Of the remaining amount, \$702 is additional increase in other general expense and \$316 is a decrease in the amount previously transferred to other accounts. We believe the increase in general expense is approximately \$1,000 in excess of a reasonable amount. The additional

salaries expense of \$1,160 should be allowed. However, no evidence has been submitted which would substantiate the proposed increase in other general expense. It is to be noted that other general expenses in 1940 approximate the level experienced by the applicant in previous years. The applicant in 1940 charged \$300 of general officers' salaries other than that of the secretary and manager to other accounts. Since this amount has apparently been charged to other expense accounts and is therefore included in our estimated cost of operation, it should be excluded from the calculation of general expense. The maximum amount to be allowed for future general expense therefore should not exceed \$5,392.46.

Depreciation expense will increase materially over amounts accrued by the applicant in 1939 and 1940 because of the acquisition and subsequent rehabilitation of property of the former Crawford County Telephone Company. This is borne out by the fact that according to the applicant's balance sheet, telephone plant in service increased from \$40,714 as of December 31, 1939, to \$66,381 as of June 30, 1941. The estimated future accrual in the amount of \$3,058 equals approximately 4.44 per cent of telephone plant in service as of June 30, 1941, plus certain proposed immediate future net additions of \$2,500. The estimated future accrual has been calculated by the application of class depreciation rates to the various property accounts. No evidence has been submitted as to the service life and salvage value used in arriving at the class rates. A slight revision in the class rates for buildings, central office equipment, sta-

RE BOSCOBEL TELEPHONE CO.

tion apparatus, and underground cable would result in an estimated future accrual of \$2,925. This amounts to approximately 4.25 per cent of property instead of 4.44 per cent. We believe that this amount is more nearly representative of the depreciation experience of telephone utilities of similar characteristics. We do not infer that the class rates for the accounts enumerated above are erroneous. However, because of the lack of substantiating data relating to service life and salvage value and depreciation experience of this particular utility, we have used revised rates which reflect the experience of similar companies.

The amount of taxes as computed by the applicant is subject to revision because of the proposed changes in toll revenue and general and depreciation expense. If such items are revised as proposed, state and Federal income taxes will increase approximately \$208.37 per year.

Based on the revisions heretofore stated, the estimated future income account under the proposed increased rates and expenses would be as follows:

TABLE II

<i>Operating Income</i>	
Local service revenues	\$16,574.04
Toll service revenues	5,406.96
Miscellaneous revenues	100.00
Subtotal	\$22,081.00
Uncollectible revenues (dr.) ...	50.00
Total Operating Revenues	\$22,031.00
<i>Operating Expenses</i>	
Maintenance expense	\$2,751.00
Traffic expense	5,867.40
General expense	5,392.46
Subtotal	\$14,010.86
Depreciation expense	2,925.49
Taxes	1,947.95
Total Operating Expenses	\$18,884.30
Net Operating Income	\$3,146.70

[2] The applicant has estimated that the rate-making value of its property will be \$53,210.40. This amount is derived by adding to the gross book value of property as of June 30, 1941, amounting to \$68,880.54, the sum of \$2,500 as immediate future additions and then deducting the depreciation reserve of \$17,571.22. To the resulting figure of \$51,309.32 has been added working capital amounting to \$1,901.08. We believe that this estimated rates base is reasonable for this proceeding.

The estimated net operating income of \$3,146.70, when related to the above rate base, indicates that the applicant will earn a rate of return of 5.9 per cent under the proposed schedule of increased rates. Under the circumstances, the applicant would not be earning, on the basis of the proposed schedule of rates, in excess of what is considered to be a fair return.

There was opposition to the proposal of the applicant to increase its switching service rate from \$4.25 to \$6 per year. We consider that switching service rates should be no more than the actual allocated costs of performing switching service. Although no cost allocation has been made in this proceeding, our experience indicates that if one were made it would result in a cost of about \$6 per year.

The Commission finds:

That present rates of Boscobel Telephone Company are unreasonable and that the rates herein ordered to be effective as of January 1, 1942, are reasonable.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

PENNSYLVANIA PUBLIC UTILITY COMMISSION

J. Austin Stoner

v.

Marysville Water Company

[Complaint Docket No. 13486.]

Valuation, § 202 — Abandoned property — Water supply.

1. A spring no longer used or useful in the public service as a source of supply should be excluded from the rate base of a water utility, together with water diversion rights, rights of way, transmission mains, and gate valves operated in connection therewith, p. 232.

Valuation, § 102 — Accrued depreciation — Compound interest method.

2. Accrued depreciation was determined by the 4 per cent compound interest method, p. 232.

Valuation, § 119 — Overheads — Construction cost.

3. Construction costs are not properly includable in overheads but should be distributed in the direct construction cost, p. 232.

Valuation, § 30 — Rate base — Historical cost — Reproduction cost.

4. Fair value of the used and useful property of a water utility for rate-making purposes was determined upon evidence of depreciated historical cost and depreciated reproduction cost, with an allowance for cash working capital, where no evidence of original cost had been produced, p. 233.

Expenses, § 111 — State loans taxes.

5. State loans taxes are not allowable as an operating expense for rate-making purposes, p. 234.

Depreciation, § 32 — Annual allowance — Compound interest method.

6. Annual depreciation allowance of a water utility was determined by the 4 per cent compound interest method, p. 234.

Expenses, § 9 — Proof required.

7. Allowances for expenses anticipated in the future are precluded when no evidence is given to support the claim, p. 234.

Rates, § 603 — Water — Quarterly minimum charge.

8. A water rate schedule is faulty when it contains a quarterly minimum charge of \$3 for any quarterly consumption through a $\frac{1}{2}$ -inch meter not exceeding 7,500 gallons, being applicable to each of a group including about 30 per cent of the quarterly meter rate consumers, who would each pay \$3 for differing consumptions between 0 and 7,500 gallons, p. 235.

Rates, § 253 — Tariff provisions — Payment after increase — Discontinuance.

9. A tariff of a water utility should not contain a provision that if a rate is increased the customer shall have the option of discontinuing service, but shall be obligated to pay the increased rate from the effective date thereof until service has been discontinued, p. 235.

STONER v. MARYSVILLE WATER CO.

Rates, § 270 — Flat or meter — Tariff provisions.

10. A tariff provision that the company reserves the right to install meters and apply meter rates while flat rate customers shall have the right to request and receive metered service should be changed to provide that, with the exception of fire protection service, meter rates shall be available for service at the option of either the company or the customer and, once meter rate service to a customer is established, thereafter flat rate service shall not be made available, p. 235.

Service, § 153 — Applications and contracts.

11. A water utility should provide for a written service contract definitely setting forth the contractual rights and obligations of the parties, p. 236.

Service, § 288 — Installation rules — Furnishing and maintenance of meter.

12. An installation rule of a water utility should provide that the company shall furnish, install, and maintain the service meter for meter rate service, p. 236.

Service, § 290 — Installation rules — Maintenance of curb stop.

13. A curb stop is essential and reasonable for the purpose of control by a water company of each service connection, and the water company should maintain, as well as install, its service connection facilities, p. 236.

Service, § 169 — Resale rule.

14. A rule of a water company providing that, except under special agreement, water supplied to customers shall not be resold except under specified circumstances has no proper place in a tariff, and, furthermore, the subject of regulation of any such resale, including rates, would be under the Commission's jurisdiction and is beyond the rightful control of the company or limitations by its tariff, p. 236.

Payment, § 20 — Billing — Monthly meter rate service.

15. A rule providing that bills for service under meter rates will be rendered quarterly for service rendered in the preceding service period should be amended if industrial monthly meter rate service is to be billed monthly, p. 237.

Payment, § 53 — Penalty rule.

16. A rule providing that bills not paid within twenty days from the due date will have a penalty of 5 per cent added should be modified to provide that bills for service not paid within twenty days from date of bill will have a penalty of 5 per cent added, except that for bills to the commonwealth or any department or institution thereof, the period before penalty shall be thirty days, p. 237.

Payment, § 33 — Discontinuance because of arrearage — Rule.

17. A rule providing for shutting off water supply in case a customer is in arrears in payment of bills rendered should be amended so as reasonably to define when a customer is in arrears, p. 237.

Service, § 137 — Rules as to discontinuance — Tampering.

18. A rule reserving the right to a water company to shut off the supply and remove its equipment without notice in case the company's property on premises has been interfered with, or in case of tampering with service pipes, meters, or other appurtenances, should be amended by eliminating the reference to "tampering" and by substituting under the heading "Violations" a rule providing that the company may discontinue service to a

PENNSYLVANIA PUBLIC UTILITY COMMISSION

customer after due notice for violation of any of the tariff rules and that the service will not be resumed until reasonable assurance of compliance by the customer with the rules, p. 237.

Service, § 133 — Grounds for denial — Writ or execution against premises — Bankruptcy.

19. A rule providing that a water company reserves the right to shut off the supply and remove its equipment from premises without notice in case a writ or execution is issued against the customer, or in case the premises are levied upon, or in case of assignment or act of bankruptcy on the part of the customer, should be eliminated as neither reasonable nor necessary, p. 238.

Service, § 146 — Rule as to discontinuance — Emergency curtailment.

20. A rule under the heading "Governmental Authority" providing that a water company reserve the right to curtail or discontinue service in case it becomes necessary in compliance with an order or request of Federal or state authorities, or in case of emergency, should be amended by eliminating the proposed heading and text entirely and by substituting, under the heading "Emergency Curtailment," a rule providing that the company reserves the right temporarily to curtail or discontinue service, after reasonable notice, in case it becomes necessary in the public interest by reason of emergency circumstances beyond the company's control, p. 238.

(BUCHANAN, Commissioner, dissents in separate opinion.)

[January 19, 1942.]

COMPLAINT against increased water rates; complaint sustained in part and rules and regulations revised.

By the COMMISSION: On January 30, 1941, the Marysville Water Company, respondent, filed a proposed tariff, designed as Tariff Pa. P.U.C. No. 3, superseding Tariff Pa. P.U.C. No. 2, to be effective on April 1, 1941. On March 11, 1941, a complaint was filed against the proposed tariff on behalf of Mr. J. Austin Stoner, a consumer of water furnished by respondent. The complaint alleges that the rates contained in the proposed tariff would be unjust and unreasonable. Mr. Stoner also petitioned that the Commission suspend the proposed rates.

The Commission did, by an order dated March 24, 1941, suspend the proposed tariff for a six months' period from April 1 to October 1, 1941, and again, by order dated September

10, 1941, the Commission further suspended it for an additional three months' period from October 1, 1941, to January 1, 1942. Hearings were held on October 15, 1941, and on November 20, 1941. Following the last hearing, respondent filed a tariff supplement making the effective date of its proposed tariff February 1, 1942, to allow time for the filing of briefs by the parties and review of the testimony by the Commission.

The burden of proof is on respondent. After respondent concluded its testimony in chief and rested, complainant cross-examined and rested its case. Since complainant offered no witnesses, all of the direct evidence of record is that produced by respondent.

The Marysville Water Company

STONER v. MARYSVILLE WATER CO.

was incorporated on April 5, 1895. It operates a gravity water supply system in the borough of Marysville and the township of Rye, in Perry county. At December 31, 1940, it was serving some 622 consumers, of whom 422 received metered rate service and 200 received flat-rate service. Under the present rates the flat-rate consumers are charged, on the average, slightly less than \$10 per year. Under the proposed rates it is estimated that the average increase will be \$2 per year. A one-family metered rate residential consumer, under the present tariff, is allowed 12,500 gallons of water per quarter for one-family use for the minimum charge of \$2.50. The proposed tariff will allow a residential consumption of 7,500 gallons per quarter through a $\frac{5}{8}$ -inch meter for \$3, which is the proposed minimum charge.

Respondent has three gravity sources of water supply, viz.: an intake on Lambs Gap run, a tributary of Fishing creek, located $4\frac{1}{2}$ miles west of the borough; an intake on Trout run, also a tributary of Fishing creek, located $1\frac{1}{4}$ miles southwest of the borough; and Sitterly spring located one mile northwest of the borough. At present, Sitterly spring is not used or useful; the other two sources yielding as much water as can be used and stored in wet weather and Sitterly spring yielding little or no water in dry weather. Prior to the development of these sources the supply was derived from the Susquehanna river and the water company thus delivered to the consumers a supply of untreated and unfiltered water.

Respondent's other facilities are a 250,000-gallon storage and distribu-

tion earth embankment reservoir, about $4\frac{1}{2}$ miles of 8-inch, one mile of 6-inch, and one mile of 4-inch transmission mains, about 1,200 feet of the latter being presently used as a part of the distribution system to supply a few domestic consumers, and the distribution pipe system. A map of the distribution system was furnished by respondent showing that it consists of about $6\frac{1}{2}$ miles of wrought iron and cast iron pipe varying in size from $\frac{3}{4}$ -inch to 8-inch, and that there are 31 fire hydrants on the system.

Original Cost

Respondent produced no evidence of original cost. A witness testified that prior to 1938 respondent company failed to keep its books of accounts under the Uniform System of Accounts as prescribed by the Pennsylvania Public Utility Commission and its predecessor, the Public Service Commission of the commonwealth of Pennsylvania, and no records were available to indicate the original cost of respondent's plant; therefore, the evidence of cost was presented on an historical cost basis.

Historical Cost

Respondent presented its evidence of historical cost to December 1, 1940. Based upon Exhibit No. 6, respondent's estimate of the historical cost is \$97,501.21. Of this amount \$92,580.85 is the estimate of physical property and \$4,920.36 is the estimate of overhead costs. Overhead costs include engineering and supervision 3 per cent; administration during construction 0.5 per cent; legal during construction 0.5 per cent; insurance, taxes, and interest 1.5 per cent; and

PENNSYLVANIA PUBLIC UTILITY COMMISSION

cost of financing 2 per cent; the total overhead costs amounting to about 5 per cent of the estimated total historical cost.

[1] Since respondent's witness testified that the Sitterly spring source of supply is no longer used or useful in the public service, we will disallow all elements of cost relating to this source of supply, consisting of water diversion rights, \$22,501; rights of way, \$115; springs and wells, \$33.04; \$1,992 which represents the estimated cost of the part of the Sitterly spring transmission main not now in use; and one gate valve, \$14.25, totaling \$24,655.29. Respondent's Exhibit No. 13 sets forth additional deductions from the estimate of historical cost as follows: Estimate of base cost \$248.36; concrete walk \$238.41, and a wood screen door \$20. There is added to the historical cost estimate \$22.22 due to an error in the estimated cost of an 8-inch spiral pipe. After adjusting the estimate of historical cost for the foregoing items, a net reduction of \$25,139.84, and an additional \$330.29 for the applicable overheads, the record shows that the undepreciated historical cost of respondent's property, used or useful in the public service, is \$72,031.08 at December 1, 1940.

[2] Upon the basis of respondent's estimates of lives and ages of the various units of property and respondent's use of the 4 per cent compound-interest method, the correspondingly adjusted accrued depreciation is \$8,052.02. Upon consideration of all of the testimony and evidence with respect to accrued depreciation, the record shows that the depreciated historical cost of respondent's property, used or useful in the public service at De-

cember 1, 1940, is about \$64,000, exclusive of cash working capital.

Reproduction Cost

[3] Respondent's Exhibit No. 5 was presented as its evidence to show that the reproduction cost at December 1, 1940, was \$174,371.45. Of this amount \$25,023.86 is the estimate of overhead cost which includes contractor's workmen's compensation, and property damages insurance 3.0 per cent; social security and unemployment insurance 1.25 per cent; contractor's performance bond 1.5 per cent; engineering and supervision 6.0 per cent; administration during construction 1.5 per cent; legal during construction 1.0 per cent; interest and taxes during construction 3.0 per cent, and cost of financing 2.0 per cent. A number of these items are construction costs and are not properly includable, in the overheads, but should have been distributed in the direct construction cost.

For the same reason that we disallowed certain items of cost relating to the Sitterly spring source under historical cost we disallow similar items under reproduction cost, viz.: water diversion rights \$22,501; right of way \$115; springs and wells \$63.84; \$5,256 for the portion of the Sitterly spring transmission main not now in use, and one gate valve \$26.98. Respondent's Exhibit No. 13 shows other deductions from the estimate of reproduction cost as follows: estimate of base costs \$248.36; concrete walls \$238.41 and wood screen door \$20. Thus, total deductions in physical items are \$28,469.59, and \$1,219.15 additional in overheads. After adjusting the estimate of reproduction cost

STONER v. MARYSVILLE WATER CO.

for the foregoing items, the record shows that the undepreciated reproduction cost of respondent's property is \$144,682.71 at December 1, 1940.

After consistent adjustments to accrued depreciation on the same basis as for historical cost, the record shows that the depreciated reproduction cost of respondent's property, used or useful in the public service at December 1, 1940, is about \$128,000, exclusive of cash working capital.

Cash Working Capital

Respondent presented no evidence of requirements for cash working capital.

The proposed tariff provides that bills be rendered quarterly for service during the preceding three months, and 5 per cent penalty added after twenty days. Thus, an operating period of about three and one half months probably will elapse from the beginning of a quarter to the receipt of payments for service. Annual operating expenses, exclusive of depreciation and taxes, are about \$3,000. It follows that generally the three and one half months' operating expenses to be paid as incurred, approximate \$875. We will allow \$1,000 for cash working capital.

Materials and Supplies

Respondent's estimates of historical cost and of reproduction cost each included materials and supplies in the amount of \$701.51. Consequently, there is no additional consideration to be given to the item of materials and supplies.

Fair Value

[4] From the foregoing we summarize the evidence of value of used and useful property of respondent at December 1, 1940, as follows:

Undepreciated historical cost	\$72,000
Depreciated historical cost	64,000
Undepreciated reproduction cost ...	\$144,700
Depreciated reproduction cost	128,000
Allowance for cash working capital	\$1,000

Based thereon, we find and determine that the fair value of respondent's used or useful property at December 1, 1940, is \$90,000.

Operating Revenues and Expenses

Respondent's Exhibit No. 8 contains a statement of operating revenues and expenses for the years ended December 31, 1939 and 1940, and for the nine months' period ended September 30, 1941. This exhibit is summarized as follows:

	Year Ended December 31,		Nine Months Ended Sept. 30, 1941
	1939	1940	
Operating revenues	\$7,989	\$7,484	\$5,558
Operating expenses:			
Water collection system	\$58	\$401	\$306
Purification system			4
Distribution system	63	472	304
General expenses:			
Office salaries and expenses	2,559	1,845	1,387
Stable and other property expense	151	135	104
Other	77	141	132
Taxes	815	530	446
Total operating expenses	\$3,723	\$3,524	\$2,683
Operating income (before provision for depreciation) ...	\$4,266	\$3,960	\$2,875

PENNSYLVANIA PUBLIC UTILITY COMMISSION

[5] Although complainant took no issue in regard to either operating revenues or expenses, we find that in respondent's figures of taxes are included the following charges for state loans taxes which are not allowable for rate-making purposes:

Year 1939	\$418
Year 1940	234
Nine months 1941	269

The elimination of these items results in the following showing of operating income, before provision for depreciation:

Year 1939	\$4,684
Year 1940	4,194
Nine months 1941	3,144

Projecting the net income for the first nine months of 1941 on an annual basis, it appears that the operating income for the year 1941 (before provision for depreciation) would approximate \$4,192. Consideration of this figure with the operating income for the years 1939 and 1940 indicates that the 3-year average income of respondent, before providing for depreciation on its property, was \$4,268.

Annual Depreciation

[6] Respondent's Exhibits Nos. 5 and 6 show annual depreciation estimates in accordance with the 4 per cent compound-interest method. Annual depreciation is thus estimated at \$652.20 on historical cost basis and \$1,124.52 on reproduction cost basis. Following analyses of the various exhibits and the testimony relating thereto and after adjustments in these estimates for deductions of various items of nonuseful property, the foregoing estimates should be revised accordingly to \$633.89 and \$1,082.74, respectively.

The annual depreciation so computed is 0.98 per cent of \$65,000, which is the depreciated historical cost including cash working capital. Similarly, on this same basis with relation to reproduction cost, the annual depreciation is 0.84 per cent of \$129,000. In our opinion a reasonable allowance for annual depreciation is \$820, and we so find.

Return

After deduction for annual depreciation we find that the average return earned by respondent for the 3-year period ended December 31, 1941, was \$3,448. Neither respondent nor complainant introduced any testimony regarding rate of return. Respondent estimates that its annual gross operating revenues under the proposed Tariff Pa. P.U.C. No. 3 would be \$9,512 per year. This estimate was supported by detailed consumer-consumption data in respondent's Exhibit No. 13 and we believe it to be substantially correct. The anticipated gross operating revenues of \$9,512 are \$1,884 in excess of the average gross operating revenues of \$7,628 during the 3-year period considered. Accordingly, the record indicates \$5,332 available for return on the basis of this increase over the experienced 3-year average return, or \$5,402 on the basis of the \$2,028 indicated increase over the return in 1940; which would be 5.93 per cent or 6 per cent, respectively, of \$90,000 fair value of the property.

[7] Respondent claims that it will soon purchase two chlorinators, the cost of operation of which will be approximately \$343 per year. It also stated that its expenses in connection with this rate case would be \$500 but

STONER v. MARYSVILLE WATER CO.

gave no evidence supporting this claim. In its Exhibit No. 9, it is stated that its estimated Federal income tax on net income under its proposed tariff would be \$295, but gave no evidence in support of this figure. Under such circumstances, allowances for these items are precluded.

Rates and Rules

[8] Analysis of the proposed quarterly meter rates and the consumer-consumption data in the record reveals, and we find and determine, that these rates are unjust and unreasonable because, in our opinion, they would not result in reasonably equitable distribution of charges for service among respondent's quarterly meter rate consumers. The most outstanding faulty feature of these rates is that the quarterly minimum charge of \$3 is for any quarterly consumption through a $\frac{5}{8}$ -inch meter, not exceeding 7,500 gallons. The record indicates that it would be applicable to each of a group including about 30 per cent of the quarterly meter rate consumers who would each pay \$3 for differing consumptions between 0 and 7,500 gallons.

The quarterly meter rates proposed by respondent are as follows:

Consumption Charge—Quarterly	Per M
First 7,500 gallons or less	\$.40
Next 2,500 gallons per 1,00030
Next 5,000 gallons per 1,00025
Next 5,000 gallons per 1,00020
Next 5,000 gallons per 1,00015
In excess of 25,000 gallons10

Minimum Charge—Quarterly	
$\frac{5}{8}$ " meter	3.00
$\frac{3}{4}$ " meter	4.00
1" meter	5.00
$1\frac{1}{8}$ " meter	15.00
2" meter	20.00
$2\frac{1}{2}$ " meter	25.00
3" meter	35.00
4" meter	50.00
6" meter	75.00

For the quarterly meter rates, we fix the following, which are not calculated to result in any materially different amount of revenue to respondent than that to be anticipated under the quarterly meter rates proposed by respondent but which, in our opinion, more equitably distribute that revenue over the consumers:

Consumption Charge—Quarterly

First 4,000 gallons or any part thereof,	\$2.65
Next 21,000 gallons at 20¢ per 1,000 gallons	
Over 25,000 gallons at 10¢ per 1,000 gallons	

Minimum Charge—Quarterly

For service through	
$\frac{5}{8}$ " meter	\$2.65
$\frac{3}{4}$ " meter	4.50
1" meter	7.00
$1\frac{1}{8}$ " meter	13.00
2" meter	20.00
$2\frac{1}{2}$ " meter	30.00
3" meter	40.00
4" meter	65.00
6" meter	130.00

[9] In respondent's proposed tariff, certain rules and regulations are included, which we find and determine are unjust, unreasonable, improper, or faulty. We will order that they be changed, amended, modified, or eliminated as hereafter indicated.

"2. *Revisions.* . . . If any rate for water service is increased, the affected customers shall have the option of discontinuing service, but shall be obligated to pay the increased rate from the effective date thereof until service has been discontinued."

This last sentence shall be eliminated for the reason that it has no proper place in a tariff.

[10] "3. *Application of Meter Rate.* The company reserves the right to install meters and apply meter rates to all customers now receiving service under flat rates. Flat rate customers also have the right to request and receive metered service."

PENNSYLVANIA PUBLIC UTILITY COMMISSION

This shall be changed to provide that, with the exception of fire protection service, meter rates shall be available for service at the option of either the company or the customer and, once meter rate service to a customer is established, thereafter flat rate service shall not be made available. It is generally conceded that meter rate service is more just and reasonable than flat rate service.

[11] "4. *Application.* The company reserves the right to require the customer to sign a written application for water service, indicating the rate under which service is to be supplied. Receipt of water service shall constitute the receiver a customer of the company, subject to its rules and regulations, whether service is based upon contract, agreement, accepted signed application, or otherwise."

This shall be changed to provide that (1) before service is initiated, a party desiring to obtain service shall make written application for service on a form to be provided by the company and upon approval of the company indicated thereon it, together with the effective tariff, shall become the service contract and the applicant and the company shall thus become the contracting parties; and (2) a new application and resulting service contract shall be executed in any instance involving a change in the contracting party, customer's location, or in the class or scope of service to be taken, or in any instance of service being taken which is not covered by an existing service contract. It is unreasonable not to have a written service contract definitely setting forth the contractual rights and obligations of the parties.

42 PUR(NS)

[12] "6. *Installation Rules.* . . . C. Customer must provide suitable housing facilities for the meter. In case no suitable meter housing is available on or about the premises, the owner of the premises will be required to furnish an approved meter housing which the company will furnish at cost."

This shall be modified by adding, as the first sentence, the provision that the water company shall furnish, install, and maintain the service meter for meter rate service. Rules 7 and 16 mention "the company's meters." It is both essential and reasonable that the water company own and fully control the service meter and the tariff should definitely so provide.

[13] "D. Only one service will be supplied to a customer under one contract. Services at different points shall be metered and billed under separate contracts. The service line from the main to the curb, involving the curb stop and box, where such are used, will be installed at the expense of the company."

This shall be modified or revised by eliminating—"where such are used" and by adding "and maintained" following the word "installed." It is essential and reasonable that there be a curb stop for the purpose of control by the water company of each service connection and the water company should maintain, as well as install, its service connection facilities.

[14] "9. *Resale.* Except under special agreement, water supplied to customers shall not be resold other than when supplied to customers operating office buildings and buildings of similar character, in which event it may be resold by the customer to tenants, pro-

STONER v. MARYSVILLE WATER CO.

vided such tenants occupy the premises designated in the contract between the customer and the company, and the rates charged such tenants by the customer correspond to the rates charged by the company for a like amount of service."

This shall be eliminated for the reasons that it has no proper place in a tariff and, furthermore, the subject of regulation of any such resale, including rates, would be under the Commission's jurisdiction and is beyond the rightful control of respondent or limitations by its tariff.

[15] "11. *Bills*. Bills for all customers receiving service under flat rates will be rendered quarterly for service furnished during the preceding three months. Bills for service under meter rates will be rendered quarterly for service rendered in the preceding service period. All bills are payable upon presentation at the office of the company during its regular office hours, or to any of its authorized collecting agents."

If the industrial monthly meter rate service will be billed monthly, then it follows that this rule shall be amended, by change and addition, to provide accordingly.

[16] "12. *Discount and Penalty*. Bills not paid within twenty days from the due date will have a penalty of 5 per cent added."

This shall be modified to provide that bills for service not paid within twenty days from date of bill will have a penalty of 5 per cent added; except, that for bills to the commonwealth of Pennsylvania or any department or institution thereof, the period before penalty shall be thirty days. The Commission, by regulation, has provided

at least thirty days for payment of net bills for service to the commonwealth.

[17] "18. *Arrears*. In case the customer is in arrears in the payment of bills rendered, the company upon reasonable notice may shut off the supply of water service and remove its equipment from the premises, except that on all bills to the commonwealth or any department or institution thereof, a bill is not in arrears until at least thirty days from the due date. A charge of \$2 will be made to cover the cost of reconnecting, which charge must be paid before service is again provided."

This shall be amended to reasonably define when a customer is in arrears, by striking out the portion of the sentence beginning with the word "except," and by adding after the words "bills rendered," the words "for water service, including any penalty incurred thereon, after thirty days have elapsed, following the date of the bill, then. . . ."

[18] "23. *Tampering*. The company reserves the right to shut off the supply of water service and remove its equipment from the premises without notice in case the company's property on the premises has been interfered with, or in case evidence is found that the service pipes, meters, or other appurtenances on the premises have been tampered with."

This shall be amended or changed by eliminating the proposed heading and text entirely and by substituting therefor, under the heading of Violations, the rule providing that the company may discontinue service to a customer, after due notice, for violation of any of the tariff rules and the service will not be resumed until reasonable

PENNSYLVANIA PUBLIC UTILITY COMMISSION

assurance of compliance by the customer with the rules. The proposed rule would be unreasonable and unnecessary in view of the protection afforded the company by other rules (15, 16, and 17).

[19] "25. *Writs and Levies.* The company reserves the right to shut off the supply of water service and remove its equipment from the premises without notice in case a writ or execution is issued against the customer, or in case the premises to which service is supplied is levied upon, or in case the assignment or act of bankruptcy on the part of the customer."

This shall be eliminated because it is neither reasonable nor necessary. The rule might be grossly unjust to a consumer who is a tenant. The company has the protection afforded by its rules as proposed regarding deposits to insure payment for service.

[20] "26. *Governmental Authority.* The company reserves the right to curtail or discontinue the supply of water service in case it becomes necessary for the company to do so in compliance with any order or request of the Federal or state authorities or in case of emergencies."

This shall be amended or changed by eliminating the proposed heading and text entirely and by substituting therefor, under the heading Emergency Curtailment, the rule providing that the company reserves the right to temporarily curtail or discontinue its water service, after reasonable notice, in case it becomes necessary in the public interest, by reason of emergency circumstances beyond the company's control. The proposed rule is unreasonably limited in its scope.

In view of the foregoing, and in

addition to our previously stated findings that the quarterly meter rates and certain aforementioned rules and regulations in respondent's proposed Tariff Pa. P. U. C. No. 3, are unjust and unreasonable, we also find and determine that the amount of the \$9,512 total annual operating revenues anticipated by respondent under its proposed Tariff Pa. P. U. C. No. 3 is not unjust, unreasonable or excessive; therefore,

Now, to wit, January 19, 1942, it is ordered:

1. That the complaint be and is hereby dismissed in so far as it pertains to the gross revenues to be derived from the application of the rates in Tariff Pa. P. U. C. No. 3.

2. That the complaint be and is hereby sustained in so far as it pertains to the reasonableness of the meter rates and rules and regulations in Tariff Pa. P. U. C. No. 3.

3. That on or before January 30, 1942, the Marysville Water Company, respondent, file, post, and publish a tariff, to become effective February 1, 1942, containing the following:

(A) All of the rates proposed by respondent in Tariff Pa. P. U. C. No. 3, except the quarterly meter rates.

(B) The quarterly meter rates hereinbefore fixed by the Commission.

(C) The rules and regulations in Tariff Pa. P. U. C. No. 3, as revised in accordance with the Commission findings hereinbefore stated with respect thereto.

Commissioner Buchanan files a dissenting opinion.

Dissenting Opinion

BUCHANAN, Commissioner, dissenting: Unlike the Edison Light

STONER v. MARYSVILLE WATER CO.

and Power Case (Public Utility Commission v. Edison Light & Power Co. Complaint Docket No. 11108, 42 PUR(NS) —,) where "fair value" was found to be "reproduction cost new" of plant less depreciation, "fair value" in this case as found by the majority is the average of historical cost less depreciation and "reproduction cost new" less depreciation.

The only similarity between the two decisions is that consumers of Edison Light and Power obviously entitled to a reduction on the face of the record got the least possible reduction, whereas, consumers of Marysville Water Company with an equally obvious reduction from the new tariff, received no reduction whatsoever.

In addition to the "fair value" finding, I have objection to the use of the 4 per cent compound interest method of calculating depreciation. The compound interest method of calculating depreciation results in a more favorable picture for the utility in this rate case than the straight-line method as used by the utility in its normal bookkeeping. In the 1938 annual report of this company to the Commission, the company states that it calculated depreciation on a straight-line method by charging $\frac{1}{2}$ of 1 per cent of its plant value annually to operating expense. There can be no good reason why the standard method of calculating depreciation in ordinary bookkeeping practices by this company and the industry generally should be completely discarded for another system merely because it would present a more favorable picture in a rate case.

But the objections to the "fair value" determination and to the 4 per cent compound interest method of cal-

culating depreciation do not present the full picture in this case.

Marysville Water Company filed a new tariff calling for a drastic increase in rates to all except the large consumers, Pennsylvania Railroad and Morrison Railroad Supply Corporation. This complaint was entered by J. Austin Stoner against such increase. There were two hearings. The complainant appeared at the first but did not appear at the second hearing. Why he dropped out of the case is not known.

Marysville Water Company was formed in 1895. The company prior to 1938 did not even keep a set of books. However, in that year the company did, with the assistance of an engineer, devise a so-called system of books and filed with the Commission an annual report. The opening book entries as shown by the annual report filed for the year 1938 were as follows:

Account 100	
Fixed capital installed	
prior to Jan. 1, 1918	\$85,000.00
Account 101	
Fixed capital installed	
from Dec. 31, 1917 ..	3,568.89
	<hr/>
Gross fixed capital	
installed Dec. 31, 1938 ...	\$88,568.89
Less	
Account 102	
Depreciation of structures and	
equipment reserve	9,550.00
	<hr/>
Total fixed capital	
Dec. 31, 1938	\$79,018.89

Curiously enough these figures approximate the total securities of the Marysville Water Company, presently outstanding, which consist of a \$55,000 mortgage and common capital stock of the par value of \$30,000. However, at the first hearing, it was testified that the Sitterly spring source

PENNSYLVANIA PUBLIC UTILITY COMMISSION

of supply is no longer used or useful which will effect a reduction in the plant valuation of \$24,655.29. Other deductions on the basis of the testimony bring this sum to \$25,470.13. Deducting this amount from the book values above recited would show a book valuation of \$53,548.76, or a valuation of plant approximately \$1,500 less than the face amount of the mortgage and \$31,500 less than the total of the mortgage and the capital stock.

The purpose of the new tariff filed by the water company is to provide a return to the stockholders but, on the basis of the company's own books and its own testimony before the Commission, the stock is worthless and, therefore, not entitled to any return. As a matter of fact, if the original prudent dollar investment was to be recorded on the books of the company, that investment probably would not exceed \$25,000 or \$30,000 which approximates the amount of "overheads" claimed by the company in its reproduction cost new estimate. If this was established as a fact, the mortgage would represent inflated values to a dangerous degree.

The Marysville Water Company operates a gravity system, that is the water flows from natural sources, a spring, etc., through the mains and distribution system to the consumer. It is the cheapest form of community water supply. There is little or no maintenance charges or operating expenses of any kind. In this case even the meters are owned by the consumers. Yet with this picture before us, the majority permits a tariff to go into effect that might be questioned as unreasonable if filed by a company using the normal pumping system for sup-

plying this community. On the basis of comparative tariffs alone, this one before us is outrageously high.

This case is not a Commission case but it has always been my theory of the Commission function that when a complaint is filed and a sufficient showing of fact is made to substantiate the complaint, the Commission should enter the picture with all of the facilities which it has at its command and come out with a proper answer rather than to make a finding upon a record which obviously is inflated, puffed and prejudiced toward the respondent company's position.

The rates under the new tariff are too high. The revision of it by the Commission does not alter the total revenue to be derived but merely alters the source of it. The rates are too high for three reasons:

First, "fair value" as found by the majority is merely an average of historical cost estimates and reproduction cost estimates coupled with the use of a bastard method of calculating depreciation both annual and accrued.

Second, because undoubtedly they are based upon inflated values. An analysis of reports filed by the Commission plus the evidence in this case indicates that plant value is less than the face amount of the mortgage outstanding. The stockholders may not be entitled to a return from this water plant in any event as the record strongly indicates that said stockholders may not have a dime invested in the property and the plant may have been excessively financed through the first mortgage placed upon it.

Third, and finally, a comparison of the tariff, even as revised by the Commission in this case, indicates that the

STONER v. MARYSVILLE WATER CO.

rates are comparable to the rates of a water system which supplies its customers through pumping facilities. I can't believe that rates which would be high for a pumping operation could apply to a gravity system which is the

simplest and least expensive of water supply and distribution system known.

It is my opinion that this case should be reopened and Commission technicians put to work on critical analysis of it.

COLORADO PUBLIC UTILITIES COMMISSION

Re City of La Junta

[Application No. 5619, Decision No. 18070.]

Franchises, § 3 — When required — Municipal plants — Extraterritorial service.

1. A county franchise to use roads for service lines is required before a municipal light and power plant may extend its lines into adjacent unincorporated territory, p. 246.

Certificates of convenience and necessity, § 52 — When required — Municipal plants — Extraterritorial service.

2. A municipal light and power plant must obtain a certificate before it can extend its system and service to customers beyond the corporate limits, p. 246.

Monopoly and competition, § 79 — Municipal and privately owned plants — Extraterritorial service.

3. A municipal light and power plant may not obtain a certificate to extend its system to adjacent territory which is being served adequately and satisfactorily by a certificated utility company, p. 246.

Certificates of convenience and necessity, § 89 — Proposal to furnish free lighting service — Municipal plants.

4. The proposal of a municipal light and power plant to furnish free street lighting service in outside territory cannot be considered in determining whether public convenience and necessity do or do not require the service proposed, p. 246.

[December 24, 1941.]

APPPLICATION for certificate to extend municipal light and power service to adjacent area; denied.

APPEARANCES: Robert R. Sabin, La Junta, and Clyde C. Dawson, Jr., La Junta, for the applicant; J. W. Preston, Pueblo, and Joseph L. Peterson, Pueblo, for protestant.

By the COMMISSION: The city of La Junta, Colorado, Otero county, which since March, 1940, has operated a municipal light and power system, serving the residents of said city,

COLORADO PUBLIC UTILITIES COMMISSION

only, herein seeks a certificate of public convenience and necessity to extend its service to certain unincorporated fringe territory adjacent to or in the immediate vicinity of its corporate boundaries, which presently is served by Southern Colorado Power Company under certificate of public convenience and necessity from this Commission and a franchise from Otero county, it thereunder being required to pay 2 per cent of its gross earnings to Otero county for privilege of constructing and maintaining its power lines along the roads and highways of said county.

The power company protested, and the matter was heard in La Junta, Colorado.

A number of motions were filed by protestant in advance of taking testimony, and ruling thereon was reserved.

It appeared that La Junta, a city of 7,040 people, is in the county of Otero, and is the county seat, and the center of a substantial Arkansas valley farming community. The Atchison, Topeka and Santa Fe Railroad shops are located adjacent to, but not within, the city limits of La Junta. The railroad supplies its own power and light service. Several thousand people reside in so-called "North La Junta" and balance of fringe territory. La Junta largely is dependent for its continued prosperity on said railroad shops, and on the territory adjacent to it, which largely has been settled by employees of railroad. Until March 14, 1940, protestant served territory extending along Arkansas river from its source as far east as, and including, La Junta. At that time, by contract of purchase, La Junta acquired and took

over protestant's distribution system in the city. Protestant then reconstructed and rehabilitated its distribution lines in order to serve the territory involved herein, which city then did not seek to serve, and secured from the city a franchise to maintain and operate its substations in the city, and its distribution lines leading therefrom to the fringe territory in question. Incidental to the changes due to the city's inaugurating its municipal plant, the protestant removed its office for administering the territory which it continued to serve to Rocky Ford, about 12½ miles west of La Junta. La Junta's original plant generating capacity of 2,000 kilowatts apparently proved inadequate, and additional generating units of 1,750 kilowatt capacity are being installed, the cost of which, like cost of original plant and distribution system, is to be financed by issuance of revenue bonds. In the opinion of the municipal plant manager, capacity of plant will be adequate to care for present and future needs of city and fringe territory city proposes to serve. Protestant serves 408 users of electricity, residing in the fringe territory.

A number of residents of the area, by petition, and a few in person, supported the application. It appeared that, for the most part, they did so, not because of any inadequacy in service of protestant, but because the city promised to furnish street lighting in fringe territory free of cost. Petition offered by the city, like counter petition filed by protestant, for a number of reasons, is of little, if any, probative value. While the city attempted to show that servicing of company's lines from Rocky Ford was incon-

RE CITY OF LA JUNTA

venient and unsatisfactory, after a great number of witnesses from territory in question testified to uniform, excellent, and adequate service of protestant, which was not disputed by the two witnesses from said area who testified for the city. The city, in its brief, admitted that protestant's service to consumers in outside territory is adequate, and stated that city did not attempt, or seek, to establish the contrary, so the city's position, as outlined in brief of counsel, generally speaking, now is:

"That the public convenience and necessity will be served by permitting it to serve this territory, regardless of whether the present service is as adequate as generally furnished by public utilities companies in this territory. . . . That, in a broad sense, the public convenience and necessity will be served by permitting it to serve the territory in question, since the interests of the city and of outside territory are identical. . . . The interests of La Junta and of the residents of the outside territory cannot be separated. The city has a real interest in not only giving adequate service to this outside territory, but in its development. This, in the opinion of the city counsel and of the mayor will best be accomplished by permitting the city to serve this territory."

Protestant maintains that by authority of the Commission it already is in the field which city proposes to serve; that its right to serve should be protected, and before a certificate can issue to the city, it must allege and prove that said territory is not being adequately, efficiently, and satisfactorily served; that city concedes service is satisfactory; that it is not the char-

acter of the service now being rendered in the fringe territory which prompts the application, but the city is actuated by its desire to get additional revenue at the expense of protestant, and that application should be denied.

Answering the city's contention that fringe territory is a part of the metropolitan area of La Junta, and that the residents of this area, with few exceptions, are either employed in the city, or are dependent upon the prosperity of the city for their livelihood, and as such, are interested in the continued prosperity of the city and its municipal activities, counsel quotes from Manager Klein's testimony, that there is very little truck farming done, and there is no material reason to encourage truck farming in North La Junta; that people in fringe territory are not dependent upon city for support; that the major industry which supports both the city of La Junta and the community of North La Junta is the Santa Fe shops, *also located outside the city of La Junta* served by neither utility; that the city does not desire to, or propose to, annex fringe territory.

Protestant further contends that a city operating as a public utility outside of the city limits stands in exactly the same position as any other public utility operated by a private corporation, and possesses no right to occupy the public roads with its poles and lines, or to acquire a certificate of public convenience and necessity, without first having secured a franchise or right of way so to do from the board of county commissioners, citing § 36, Chap. 137 of the Public Utilities Act.

COLORADO PUBLIC UTILITIES COMMISSION

Because the city, in its application, has expressed its willingness to buy the properties of the power company in the fringe territory at a fair price to be determined by agreement, or fixed by the Commission or by the court in condemnation proceedings, it claims that extension sought does not contemplate or mean a duplication of protestant's now adequate service. In this connection, a considerable portion of counsel's brief is devoted to a discussion of the right of the city to condemn property necessary for the construction and operation of its light plant. In the Loveland Case (1926) 79 Colo 216, 228, 245 Pac 493, the supreme court refused to require the city, in condemnation proceedings, to condemn properties of utility within city limits or to acquire and pay for lines of utility in fringe area, because not needed or required for operation of city municipal plant. The court held: "It cannot force the city to buy or condemn that which it would be a waste of money to acquire, and *the city itself is without such right.*" While the record here fails to disclose any reasons other than the fact that the city believes it has some excess energy it would like to sell, and should serve the area, the question whether protestant's property is required, or is necessary or useful, if it is, for the continued operation of its light plant and service of city and its residents, and the question of its power or lack of power to condemn, in our opinion, is a judicial question, and are not questions for us to determine. For the purpose of determining question whether certificate should or should not be granted, we take the position or view that the proposed city service

would be a duplication of existing service.

In Public Utilities Commission v. Loveland (1930) 87 Colo 556, PUR 1931A 212, 218, 289 Pac 1090, the supreme court had before it a case where the city of Loveland attempted to extend its lines into territory contiguous to the city already served by Public Service Company without first procuring a certificate of public convenience and necessity, as required by § 2946, Compiled Laws of 1921, (§ 35 PUC Act; § 36, Chap. 137, 1935 C.S.A.). The city claimed the right to extend without a certificate under the exception contained in said section as: "An extension into territory . . . contiguous to its facility or line, plant or system not theretofore served by a public utility of like character." The court held: ". . . the field or territory which the city attempted to monopolize outside of its own municipal boundaries was just as contiguous to the preëxisting facilities of the Public Service Company as to those of the city. The Service Company was first in the field. *The very object of the provisions of the statute applicable here was to prevent, in the interests of the general public, unnecessary duplication of facilities or systems for furnishing the same to customers.* When the city became a public utility under the statute, it had no superior right as to territory outside of its municipal boundaries over the rights of any other public utility, private corporation, or otherwise, authorized to furnish service."

In Lamar v. Wiley (1926) 80 Colo 18, 23, PUR1927A 175, 179, 248 Pac 1009, the complaint of the town of Wiley as to rates for power furnished

RE CITY OF LA JUNTA

the town by the municipal power plant at Lamar, the court held: ". . . where a municipality, as owner of a public utility, furnishes the commodity in question to its own citizens and inhabitants, *consumers within the municipal limits*, the city itself, through its proper officers, possesses the sole power to fix rates. When a municipality, whether in its operation of its own public utility it acts in its municipal or governmental, or in its proprietary, or quasi public, capacity, or partly in one and partly in the other, and as such furnishes public service to its own citizens and in connection therewith supplies its products to consumers outside of its own territorial boundaries, *the function it thereby performs*, whatever its nature may be, *in supplying outside consumers with a public utility, is and should be attended with the same conditions and be subject to the same control and supervision that apply to a private public utility owner who furnishes like service*, . . . when the city of Lamar goes beyond its own boundaries, and furnishes its surplus utility product to the town of Wiley, an outside consumer, the city itself does not have the power to fix the rates for such service. That power resides in the state Public Utilities Commission. *Both upon authority and reason a municipally owned public utility, as to service furnished consumers beyond its territorial jurisdiction, should be, as already stated, subject to the same regulation to which a privately owned public utility must conform in similar circumstances.*"

Section 18, Chap. 137, 1935 C.S.A. (§ 18 Public Utilities Act), in part, provides:

"No public utility shall, as to rates, charges, service, facilities, or in any other respect, make or grant any preference or advantage to any corporation or person or subject any corporation or person to any prejudice or disadvantage. No public utility shall establish or maintain any unreasonable difference as to rates, charges, service, facilities, or in any respect, either between localities or as between any class of service."

In the event a certificate were granted to the city, it could not, without providing for such service in its tariffs and schedules, furnish free street lighting service to residents of fringe territory. Said schedules, before becoming effective, necessarily, would require our approval. We entertain serious doubts as to legality of such service, and probably would not approve said provisions in schedules, unless compelled to so do. See *Re Mountain States Teleph. & Teleg. Co.* (Colo) PUR1917B 198, 288. If such service could be furnished legally, it necessarily must be furnished throughout the fringe territory, without discrimination—that is, all streets and roads in the area must be lighted in the same manner, which would be unpracticable and unduly expensive for the inhabitants of the city of La Junta. Moreover, we doubt the power of the city to furnish such free service to territory outside city and its inhabitants, and believe courts in a proper action would enjoin the city governing body or its plant manager from furnishing such free service at the expense of the city and its inhabitants. See 44 CJ 4045. If schedules for outside service to customers there residing named rates for said service high

COLORADO PUBLIC UTILITIES COMMISSION

enough to cover cost of street lighting in the area, it would not be free service.

In view of the foregoing, we are of the opinion, and find that:

[1] 1. Before city could extend its lines into territory sought to be served, a franchise from Otero county to use roads and highways for service lines is required. See § 36, Chap. 137, 1935 C.S.A. (§ 35 Public Utilities Act), and Rule IV (a) of our Rules of Practice and Procedure. The cases cited by applicant (*Atchison, T. & S. F. R. Co. v. Public Utilities Commission*, 77 Colo 42, PUR1925D 243, 234 Pac 175, *Shields v. Loveland* [1923] 74 Colo 27, 218 Pac 913, and *Colorado Central Power Co. v. Englewood* [1937] 89 F(2d) 233, 21 PUR(NS) 671), in our opinion, do not hold to the contrary. However, in the past, at times, we have waived our rule requiring that said consent or franchise be procured in advance of hearing or order. If certificate were granted herein, it could issue, conditioned upon obtaining franchise from the board of county commissioners of Otero county, Colorado.

[2] 2. The city, without the consent of the Commission (certificate of public convenience and necessity) cannot extend its system beyond its corporate limits for the purpose of serving outside customers.

[3] 3. Where the territory which city seeks to serve, as here, already is served by a utility under certificate from the Commission, another certificate cannot be granted where service

of said utility is (as it here is conceded to be) adequate and satisfactory.

4. That company's customers are not unduly inconvenienced because company headquarters are located at Rocky Ford, where company maintains an attendant and branch telephone at La Junta substation, free telephone service to Rocky Ford for customers, if substation service is not available, and two places in Rocky Ford, in addition to substation, where light bills may be paid.

5. If it be conceded that the city has a real interest in the development of fringe territory, and in furnishing adequate electric service therein, and that the interests of La Junta and of the residents of the outside territory are identical, still fact is that protestant is furnishing adequate and satisfactory service, which is all the city could furnish, and said matters, even though established or conceded, do not establish public convenience and necessity.

[4] 6. That proposal of La Junta to furnish free street lighting in outside territory cannot be considered in determining whether public convenience and necessity do or do not require the service proposed.

7. That public convenience and necessity do not require the proposed service of applicant herein, and that said application should be denied.

In view of our conclusions herein, we believe disposition of protestant's motions to dismiss the application, or to strike parts thereof, are not important, and we should deny the same.

RE WESTERN COLORADO POWER CO.

COLORADO PUBLIC UTILITIES COMMISSION

Re Western Colorado Power Company

[Application No. 5640, Decision No. 18147.]

Consolidation, merger, and sale, § 35 — Grounds for disapproval — Lack of jurisdiction over vendee.

1. The mere fact that the Commission does not have jurisdiction over a rural electric association does not constitute a reason for its disapproval of a contract by an electric company to sell a portion of its property to the association, the question of jurisdiction being one of law, p. 250.

Consolidation, merger, and sale, § 6 — Commission jurisdiction — Electric property.

2. Commission approval is a necessary condition precedent to the sale or merger of electric company property, although the Commission may not lawfully interfere with the management and control of a utility beyond what is reasonably necessary to secure to the public adequate service at fair and reasonable rates, p. 250.

Consolidation, merger, and sale, § 19 — Procedure — Factors considered.

3. The Commission, in passing on an application of an electric company for authority to abandon service and to sell its property to a rural electric association, must consider not whether the proposed sale will be in the interest of the utilities involved but how it will affect service, accommodation, and convenience of the public as a whole, and whether, if sale is made, the consumers of the vendor company will continue to get proper rates and service, their interests to be subordinate however, to the public generally, p. 251.

[January 10, 1942.]

APPPLICATION of electric company for authority to abandon service and to sell its property to rural electric association; granted.

APPEARANCES: Moynihan, Hughes, and Sherman, Montrose, for the applicant; Bryant and Stubbs, Montrose, for protestants.

By the COMMISSION: The Western Colorado Power Company, applicant herein, under certificate of public convenience and necessity from this Commission, operates and maintains lines for distribution of electrical energy in certain rural areas of Montrose and Delta counties, by means of which it

furnishes electric service to families in said territory.

Delta-Montrose Rural Power Lines Association is organized under Colorado statutes, providing for organization of coöperatives. Apparently, as yet, it has not been subject to our jurisdiction. It is financed by RFC, through REA. It has constructed, or under construction, approximately 550 miles of line, and now serves about 1,150 customers in portions of the rural areas of the counties of

COLORADO PUBLIC UTILITIES COMMISSION

Ouray, Montrose, Delta, and Gunnison. Some of its transmission lines, as now constructed or to be constructed, in part, parallel lines heretofore constructed by Western Colorado Power Company in the rural areas served by it. The association buys its energy at wholesale from Western Colorado Power Company.

Applicant, believing that it is not desirable to continue to serve the areas served, or which can be served, by the association, has entered into a contract for the sale and transfer of a part of its distribution lines to the association, which proposes to serve fifteen customers now served by applicant, and twenty-two or more farmers not served by either the association or the power company, said sale and abandonment of service to areas served by said lines being contingent upon our approval, which is here sought, said lines being small segments of system totaling 4.61 miles (after eliminating area "C") as shown by said contract of sale, being Exhibit "A" attached to the application.

The matter was heard in Montrose, the application being opposed by seven of the fifteen customers of applicant immediately affected by the proposed change. Eight customers, residing in areas marked "A" and "B" on Exhibit B attached to the application, did not appear. Protestants live within a short distance north and south of the section line between sections 15 and 22, township 51-north, range 10-west, New Mexico P.M., said area being marked "D" on Exhibit B.

Exhibits 1 and 2 offered at the hearing, and Exhibit B, show lines of applicant and association now constructed, location of lines which association

proposes to construct, poles in some instances being indicated as in place, places of residence of protestants and seventeen farms west of area "B" and five farms in sections 21 and 22, township 51-north, range 10-west, New Mexico P.M., that would be served by association under extension contemplated, if instant application is granted, contracts having been signed for service about three years ago. "D" area where protestants reside involves 1.85 miles of line, and is at end of, or ties onto, transmission line extending southerly along west side of section 15. No provision is made for sale of any part of line north of southwest corner of section 15. The five farmers last mentioned never have applied to applicant for service, although applicant's lines now extend to approximately the northwest corner, northeast quarter, section 28, and to the southwest corner of section 15, said farms being from $\frac{1}{4}$ to $1\frac{1}{4}$ miles distant from power line.

Mr. Hughes, counsel for power company, stated that application was filed by the power company in line with its desire to coöperate with REA in every way, so "that as large a number of families in the valley could be energized and receive energy" as possible, power company believing that it could not serve some neighborhoods on account of sparsity of customers which association can reach with its lines and is willing to serve; that a number of years ago an agreement was effected between the association and the power company to transfer a large amount of lines to the association; that application was withdrawn, following strenuous objections on the part of customers served by power company; that, in

RE WESTERN COLORADO POWER CO.

the meantime, power company and association have agreed upon the proposal here made, which will involve as few customers as possible and still permit the elimination of some contemplated duplicating lines and some duplicating lines already constructed. Also, farms not now connected to either system will be served.

Mr. Stubbs, for protesting customers of applicant, stated that his clients were in accord with the general policy of power company and the association to furnish electric energy to all persons residing in the California-Mesa area; that application should be allowed as to sections A and B, unless the customers there residing indicate a desire to the contrary; that the application as to section D should be denied, because it is economically feasible for Western Colorado Power, not only to continue to serve them, but to serve the five persons mentioned not served who reside in sections 21 and 22; that protestants are wholly satisfied with the Western Colorado Power Company's service that they are now receiving, and desire to continue to receive, that service.

Applicant's witnesses testified that protesting customers were being served at a profit; that it probably could extend and profitably serve the five customers south of area "D" seeking service, but applicant does not want to invade association territory or attempt to serve farmers "signed up" by association; that to serve said area, it would be necessary for Western Colorado Power to purchase a line of poles between sections 21 and 22 already installed by association (which association probably does not want to sell).

Association does not propose to ex-

tend its lines from its transmission line now extending north and south along east boundary line of sections 15 and 22, westerly to connect with line of poles mentioned. Donald S. Mitchell, the association superintendent, testified that it proposes to construct line from terminus of its line near the northwest corner of section 29 easterly to pole line now extending to southwest corner of section 22, which, as shown by Exhibit B attached to the application, means paralleling applicant's line extending into sections 28 and 29 (which lines and service to farmers adjacent thereto, W.C.P. Company Superintendent Bullock stated, applicant did not contemplate transferring); that pole line along west line of sections 15 and 22, and line of poles in section "B" were constructed three years prior to hearing, but line was not completed on account of paralleling applicant's lines, and farmers then signed still are without service; that if application is not granted, association, nevertheless, will proceed with construction of connecting links, in order to complete its trunk lines, "hook up" some other areas, and serve the parties now signed, and others, who are without service; that, "it isn't a matter of going in for spite work to connect those lines through there. These customers, if they want to remain with the power company and they object to the REA, we would be more than pleased to let them remain there. We don't want them if they are satisfied with the power company. It is all right for them to remain there. We are not trying to force anyone to our lines. It is just a matter of proper economic construction policy we are trying to follow, and if we can serve them by

COLORADO PUBLIC UTILITIES COMMISSION

absorbing this line and continuing on with the construction of the plan which we made three years ago, why that's what we want to do. If they are not satisfied with the service they get there, if they are not satisfied with our service, we don't try to force anyone to stay on the line, any mile of the line"; that service to protestants, in the event application is allowed, will be furnished for same rates now charged by Western, or on REA rates, at option of customer; that there is not individual liability on part of association members.

J. A. Bettes, Harley Eckert, W. E. Rody, Joseph Catch, and Joe Kloberdanz, the five customers protesting, in person, or by stipulation, testified that Western Colorado Power service is excellent; that it is foolish to exchange good service for service that may not be satisfactory; that minimum charges of Western Colorado Power are lower than association minimums; that, in their opinion, power company is better able to serve; that they are assured of good service if they continue with the power company; that rates will not be subject to change at discretion of REA; that they now have Public Utilities Commission's protection, and want to retain it; that if connected with REA lines, it perhaps might be necessary to rewire houses and barns. In addition, Mr. Eckert stated that if authority sought is granted, he will "cut off."

Witness for Ryan estate testified that estate property is located in section 21, about one-fourth mile from Western Colorado Power line, south of protesting customers; that house is wired, and they want service, and would connect with Western Colorado

Power or association lines, if either is extended.

It appears that lines of applicant and association are in parallel in area "A." Association pole line is installed in area "B" to serve seventeen customers, but a connection with association's lines from south, east, or north would parallel applicant's lines. Area "C" was eliminated from application. No objections were interposed by applicant's customers in areas "A" and "B" to transfer. Applicant is to retain its line and its customers as far south as the southwest corner of section 15. Purchase of "D" area between sections 15 and 22 would permit association to tie into its "Coal Creek-Spring Mesa" line along east side of sections 15 and 22, if it so desired, although according to its superintendent, it contemplates an extension to area "D" from the south, where one of the two connections (meter) is made with applicant's "Highline," the other being near Delta. This line will parallel applicant's line southwest of area "D." Farmers south of this area not now served will be connected to said line. Applicant, without paralleling association's lines as now constructed, and probably with less cost than cost to association, could connect from the south, and serve said farmers.

[1, 2] All associations in the state of Colorado operating under direction of REA, to date, have taken the position that they are nonprofit cooperatives, and as such, are not subject to jurisdiction of the Public Utilities Commission. The Commission has been, and still is, of the opinion that question of our jurisdiction is one of law and, at this time, we should not

RE WESTERN COLORADO POWER CO.

disapprove a contract by a public utility to sell a portion of its electric utility property to Delta-Montrose Rural Power Lines Association on the ground that it is not, or that it contends that it is not, subject to our jurisdiction. See *Re Tennessee Public Service Co.* (Tenn 1934) 5 PUR (NS) 449.

While approval of this Commission is necessary before a sale or merger of electric utility company properties can be accomplished, the Commission may not lawfully interfere with the management and control of the utility beyond what is reasonably necessary to secure to the public adequate service at fair and reasonable rates. See *Missouri ex rel. Southwestern Bell Teleph. Co. v. Public Service Commission*, 262 US 276, 289, 67 L ed 981, PUR1923C 193, 43 S Ct 544, 31 ALR 807.

[3] The primary question here presented is not whether the proposed sale will be in the interest of the Western Colorado Power Company or the association, but how will it affect service, accommodation, and convenience of the public, as a whole, and, in this connection, if sale is made, will the users of electricity in the territory now served by applicant which is to be transferred continue to get proper rates and service under association ownership and management, their interests, however, to be subordinate to the interests of the public, generally. See *Re Tennessee Public Service Co. supra*, and *Northern Pennsylvania Power Co. v. Public Utility Commission* (1938) 132 Pa Super Ct 178, 24 PUR(NS) 443, 200 Atl 866.

The transfer contemplated would tend to settle question whether association or applicant will serve several rural areas long in controversy, and perhaps remove a continuing "bone of contention" and insure friendly relations between applicant and the association. Many farms now without electrical service, some of whom applicant apparently does not desire to serve, will be served through completion or extension of association lines, although in this connection, it should be pointed out that association intends to construct and extend lines whether application is or is not allowed to area southwest of "D." Such extension would mean duplication of facilities and unnecessary use of now valuable and sorely needed materials. If not extended, five customers southwest of area "D" would be without service, unless applicant extended its lines, which it admits could be done profitably. This, however, would serve no useful purpose, unless association abandons contemplated construction of link along north side of sections 29 and 28, and sells its pole line along west side of sections 21 and 22 to applicant, which apparently has not been contemplated by parties—at least such arrangement has not been submitted to us for our consideration.

It is evident, upon the record, as made, that we should approve contract submitted, as it relates to sale of facilities in sections "A" and "B." Customers of applicant residing in said areas did not protest the application, and it appeared that association's service is satisfactory, and is now enjoyed by approximately 1,150 farmers.

The proposed sale of facilities in

COLORADO PUBLIC UTILITIES COMMISSION

area "D" presents a more difficult question. Answering protestants' objections, the association's superintendent stated that the association members have no liability, except to pay for energy consumed at association rates; that they could receive energy, if they wished, at Western Colorado Power Company rates, including power company minimum, and expressed the opinion, not controverted, that association rates, in higher brackets, are lower than applicant's rates; that association never had required customers to rewire homes already wired. We realize that customers of applicant residing in area "D" desire to continue their very pleasant and satisfactory relations with Western Colorado Power Company, but considering the matter from the standpoint of the public interest, and the benefits that probably will accrue to rural residents of California Mesa as a whole by the inclusion of these segments in association's system, and in view of the fact we believe that

present conditions, including applicant's rates, which protestants concede to be reasonable, can be maintained by the association, and that said power company customers in area "D" will continue to receive adequate and satisfactory service at proper rates under association operation, we are of the opinion that said proposed sale by the Western Colorado Power Company is in the public interest, and should not be disapproved by us.

We, therefore, find that public convenience and necessity require the proposed transfer and sale by the Western Colorado Power Company of the facilities, except those in area "C," mentioned in Contract No. A-5, being Exhibit "A" attached to the complaint (Exhibit "3" at hearing) upon the terms and conditions set forth in said contract, and discontinuance of service by applicant on lines so sold if, when, and after the customers served by it through said facilities are connected with and served by the lines and facilities of the association.

CALIFORNIA RAILROAD COMMISSION

Re California Warehouse Tariff Bureau

[Decision No. 34799, Application No. 24453.]

Expenses, § 57 — Interest.

1. Interest on indebtedness is not an operating expense, p. 254.

Expenses, § 93 — Rentals.

2. Reasonable rental payments for property used in utility service are proper charges against such service, p. 254.

Rates, § 653 — Condition of rate order.

3. Applicants for an increase in warehouse handling rates and charges were required as a condition of the increase to agree never to urge before the Commission, in any reparation proceeding under § 71 of the Public Utilities Act or in any other proceeding, that the opinion and order had found that any individual rate authorized was reasonable, p. 255.

[December 2, 1941.]

RE CALIFORNIA WAREHOUSE TARIFF BUREAU

APPPLICATION for authority to increase warehouse handling rates and charges; granted subject to conditions.

APPEARANCES: L. A. Bailey and Reginald Vaughan, for applicant; Eugene Read, for Oakland Chamber of Commerce; John D. St. Clair, for Pacific Coast Coffee Association.

SACHSE, Commissioner: California Warehouse Tariff Bureau is a tariff publishing agency maintained by L. A. Bailey, agent. It seeks an order authorizing its members operating public utility warehouses in San Francisco, Oakland, Alameda, and Emeryville to increase rates and charges for the handling of merchandise and to make the increases effective on ten days' notice.¹

The matter was submitted at a public hearing had at San Francisco, November 3, 1941.

The rates and charges now in effect are published in California Warehouse Tariff Bureau Warehouse Tariffs Nos. 1-E and 3-E, C.R.C. Nos. 83 and 98, respectively. With minor exceptions they have remained unchanged since June 1, 1938. Those sought are contained in exhibits to the application

and are approximately 15 per cent higher than those now in effect.² They involve handling only; no increase is sought in the rates for storage.

The testimony shows that in order to terminate a strike that closed down the greater part of the warehouses involved on June 2, 1941, and for several days thereafter, applicant warehousemen increased the minimum wage level from 75 cents to 85 cents per man-hour for warehouse workers engaged in handling commodities into, from and about warehouses. The wage increase became effective June 2, 1941, and has been in effect since. Based on the wages paid in 1940, the annual wage increase is estimated as \$65,317.

Following this wage increase, applicant warehousemen increased, correspondingly, the compensation of office clerks, foremen, and other salaried employees. The annual added compensation to them is estimated at \$19,937.

The testimony further shows that under an award in an arbitration pro-

¹ The warehousemen on whose behalf the application is filed are:

A.B.C. Transfer & Storage Co.	San Francisco
Bekins Van Lines, Inc.	San Francisco
Belshaw Warehouse Co.	San Francisco
Central Warehouse & Drayage Co.	San Francisco
Clark, J. A. Draying Co., Ltd.	San Francisco
De Pue Warehouse Co. of San Francisco	San Francisco
Distributors Warehouse	San Francisco
Dodd Warehouses, The	San Francisco
Gibraltar Warehouses	San Francisco
Encinal Terminals	Alameda
Farnsworth & Ruggles	San Francisco
Haslett Warehouse Co.	San Francisco-Oakland
Howard Terminal	Oakland
Kellogg Express & Draying Co.	Emeryville

Lawrence Warehouse Co.	San Francisco
Merchants Express Corp.	Oakland
Nolan, Frank, Drayage Co.	San Francisco
North Point Dock Warehouses	San Francisco
San Francisco Warehouse Co.	San Francisco
Sea Wall Warehouses	San Francisco
South End Warehouse Co.	San Francisco
Thompson Bros., Inc.	San Francisco
Turner-Whittell Warehouses, Inc.	San Francisco
Walkup Drayage & Warehouse Co.	San Francisco

² There are certain exceptions to this general proposal. For example a 20 per cent increase is proposed in the hourly labor rate for special services. Moreover, in order to avoid impracticable fractions and to preserve rate relationships already existing certain increases proposed are slightly greater than 15 per cent.

CALIFORNIA RAILROAD COMMISSION

ceeding, the union employees of applicant warehousemen were granted vacation with pay effective on and after January 1, 1940, of two weeks each year to those employees having two or more years' service and one week's vacation with pay to employees having less than two but not less than one year's service. The added expense to applicant warehousemen because of this award is estimated by them at \$28,993. Because of the increased wages and salaries, together with vacations with pay, applicant warehousemen are required to pay added compensation insurance, unemployment insurance and old age annuities of approximately \$7,997. The four items mentioned aggregate \$122,244 per annum.

Applicant warehousemen state that this added operating expense is not covered by their tariffs now on file with the Commission and that their revenues under such tariffs cannot absorb all of this added necessary expense. The increase in handling charges sought is estimated to produce, on the basis of the 1940 handling revenues, additional annual gross revenue amounting to \$52,452.

Applicant warehousemen in 1940 reported operating revenues of \$1,339,664.46, segregated as follows:

Storage revenues	\$872,053.34
Handling revenues	349,681.00
Miscellaneous revenues	117,930.12

[1, 2] For 1940, the record shows that applicant warehousemen sustained an operating loss of \$59,727.07. In arriving at this loss, they deduct from operating revenues not only operating

expenses and taxes but also rent and interest on indebtedness. Interest is not an operating expense. Reasonable rental payments for property used in utility service are proper charges against such service. Many of applicant's warehousemen conduct their business in rented premises. Subsequent to the hearing they submitted a statement showing the location of each warehouse rented, an estimate of the market value of the land, an estimate of original cost of the buildings less depreciation in cases where the owner of the building made such data available to the tenant, the rent paid, and the square feet of warehouse space leased. A review of this statement and applicant warehousemen's operating revenues and expenses indicates that a more detailed investigation of this item is not warranted at this time. The Commission reserves the right to consider rents and the investment in rented premises further in any subsequent proceeding.

The customers of the interested warehousemen were notified of their intention to seek increased rates. Except in three instances, no objection appears to have been made to an increase.³ During the hearing representatives of the Oakland Chamber of Commerce and the Pacific Coast Coffee Association cross-examined applicant's witnesses but offered no evidence and did not register an objection to the granting of the application.

While it cannot be determined from the application whether or not each of the rates affected, as increased, will

³ Some 2,000 notices were said to have been distributed. In their notification the warehousemen represented that they would seek a general increase of approximately 10 per cent in their present storage and handling rates. Based on the warehousemen's 1940 revenue 42 PUR(NS)

figures shown in the application, the 15 per cent handling rate adjustment actually applied for would return revenues less than one-half of those which would result under the original rate proposal contained in the notification to their patrons.

RE CALIFORNIA WAREHOUSE TARIFF BUREAU

itself be reasonable, it is apparent that applicant is entitled to additional revenue. The proposed advances, considered collectively, are substantially less than the operating increases incurred.

[3] Before accepting this order applicant will be required to agree that it will never urge before this Commission, in any reparation proceeding under § 71 of the Public Utilities Act or in any other proceeding, that the opinion and order herein has found that any individual rate authorized is reasonable.

I recommend the following form of order:

ORDER

It is hereby *ordered* that California

Warehouse Tariff Bureau be and it is hereby authorized to establish, on not less than ten days' notice to the Commission and to the public, increased handling rates and charges as set forth in Part VII of the application and Exhibits "C," "D," and "E" attached thereto and made a part thereof, subject to the conditions set forth in the preceding opinion.

The authority herein granted is void unless exercised within ninety days from the date hereof.

The effective date of this order shall be ten days from the date hereof.

The foregoing opinion and order are hereby approved and ordered filed as the opinion and order of the Railroad Commission of the State of California.

CALIFORNIA RAILROAD COMMISSION

Re Southern Counties Gas Company of California

[Decision No. 34803, Application No. 24592.]

Accounting, § 21 — Bond expense.

Expenses incident to the issue of bonds should be amortized through charges to the income account or charged to surplus; they do not represent capital expenditures.

[December 2, 1941.]

APPPLICATION for authority to issue bonds; application granted.

By the COMMISSION: In this application, as amended, Southern Counties Gas Company of California asks permission to execute a supplemental indenture dated as of December 1, 1942, and to issue and sell at not less than 104 per cent of their face value and accrued interest, \$1,500,000 of first mortgage bonds, 3 per cent series due 1972, for the purpose of paying

indebtedness and for one or more of the other purposes specified in § 52 (b) of the Public Utilities Act.

Southern Counties Gas Company of California, hereinafter sometimes referred to as applicant, is engaged in the business of purchasing, collecting, transmitting, distributing, and selling natural gas as a public utility in the counties of Los Angeles, San Luis

CALIFORNIA RAILROAD COMMISSION

Obispo, Santa Barbara, Orange, and San Bernardino, and elsewhere in the southern part of the state of California. By Decision No. 34650, dated October 7, 1941, 41 PUR(NS) 295, the Commission authorized Santa Maria Gas Company and Southern Counties Gas Company of California to execute a mereger agreement and merge into the Southern Counties Gas Company of California, the surviving corporation, their respective plants, systems, franchises, permits, and other properties. Through the execution of the supplemental indenture filed in this proceeding as Exhibit "B," the properties formerly owned by Santa Maria Gas Company as well as other properties of Southern Counties Gas Company of California will be specifically subjected to the lien of the indenture securing the payment of applicant's first mortgage bonds. The supplemental indenture also defines the terms of applicant's first mortgage bonds, 3 per cent series due 1972, to which reference will be made hereafter.

Applicant, as of October 31, 1941, reports assets and liabilities as follows: [Table omitted.]

It is of record that applicant is indebted to Pacific Lighting Corporation in the sum of approximately \$1,315,000. This money was borrowed by applicant to enable it to acquire and construct additions and betterments to its properties. The indebtedness was incurred from January 31, 1940, to October 31, 1941. It is of record that from January 1, 1940, to October 31, 1941, applicant has expended for additions and betterments to its properties, the gross sum of \$3,295,774.80.

Applicant, as stated, asks permission to issue and sell \$1,500,000 of first

mortgage bonds, 3 per cent series due 1972, at not less than 104 per cent of their face amount plus accrued interest thereon to the date of delivery. It further asks permission to use the proceeds from the sale of said bonds to pay expenses incident to the issue of said bonds, to pay indebtedness due Pacific Lighting Corporation, and to use the remaining proceeds for one or more of the other purposes specified in § 52(b) of the Public Utilities Act. The order herein will authorize applicant to use said remaining proceeds to reimburse its treasury. The expenses incident to the issue of the bonds should be amortized through charges to the income account or charged to surplus. They do not represent capital expenditures.

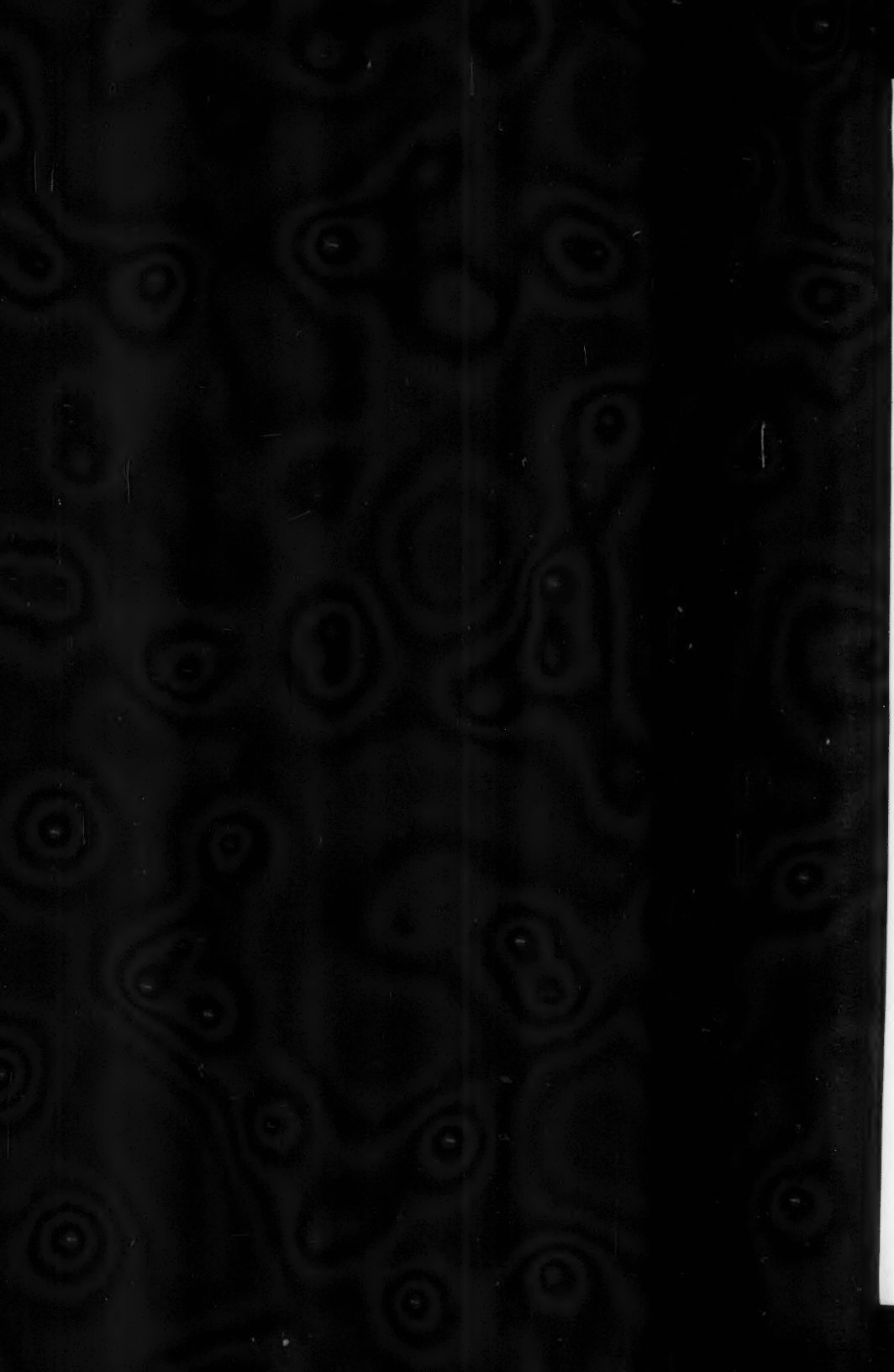
The \$1,500,000 first mortgage bonds which applicant now desires to issue will mature on January 1, 1972. The bonds will bear interest at the rate of 3 per cent per annum, payable semiannually on the first day of July and January in each year. They will be presently issued as fully registered bonds, dated July 1, 1941. They are subject to redemption at any time or from time to time, prior to maturity, at applicant's option, either as a whole or in part by lot, upon payment of accrued interest to the date fixed for the redemption thereof, plus that percentage of the principal amount thereof applicable to such date, in accordance with the following (wherein all dates are inclusive) namely: [Table omitted.]

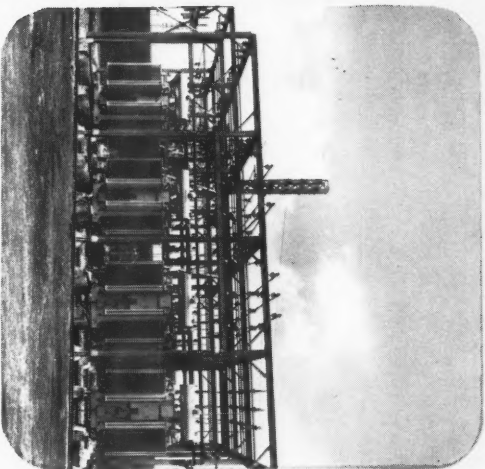
As a condition precedent to the redemption of the bonds, the company must publish notices of redemption pursuant to the terms of the indenture securing payment of the bonds.

s due
nt of
inter-
y. It
e the
bonds
issue
s due
nd to
ne or
ed in
Act.
appli-
eds to
enses
bonds
arges
ed to
capital

ttgage
res to
1972.
at the
yable
July
y will
stered
y are
ne or
urity,
whole
of ac-
or the
rcent-
hereof
dance
dates
omit-

he re-
pany
ption
enture





Q. Are Kuhlman Power Transformers performing satisfactorily in the field?

A. Records of hundreds of installations give ample evidence that Kuhlman Power Transformers stand up on the job with a minimum of maintenance. View shows four of twelve Kuhlman 3333 KVA OISC Power Transformers serving a metropolitan area.

In addition to Power Transformers, Kuhlman builds a complete line of Distribution, Sub-T, Kuhl, CSP, and Dry Type transformers and line regulators. It will pay you to get the facts about these units which are the result of Kuhlman's fifty years experience in the building of efficient transformers.



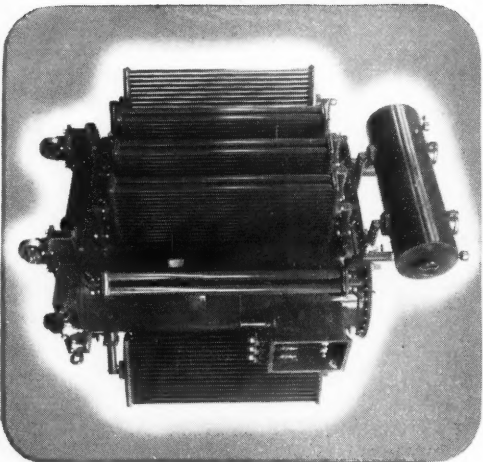
Q. Why do so many power engineers like Kuhlman Transformers?

A. From Maine to California utility men and engineers have found that Kuhlman Power Transformers easily withstand the stress and strain of constant operation and continue to give efficient, uninterrupted service year after year. Write today for complete facts.

Kuhlman

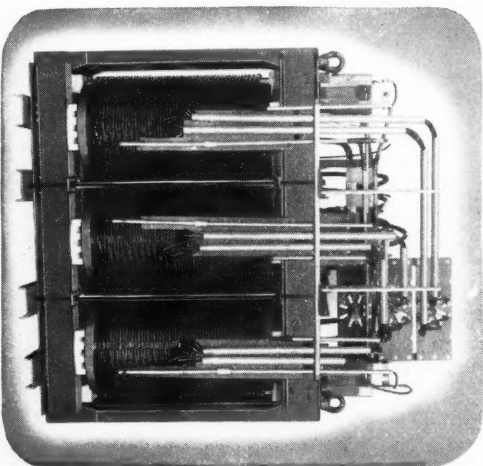
KUHLMAN ELECTRIC COMPANY • BAY CITY, MICHIGAN

ON KUHLMAN POWER TRANSFORMERS



Q. What are the most important factors in the construction of a good power transformer?

A. In power transformers the most important factors are electrical efficiency, mechanical strength and durability. Good engineering—backed by 46 years' manufacturing experience—are the reasons Kuhlman Power Transformers have these characteristics.



Q. In what ways are Kuhlman Power Transformers built to withstand stress and strain?

A. Cores and coils are braced to prevent mechanical distortion. Heavy insulation prevents dielectric failure. End-coils are reinforced to protect transformer from surge potentials. Tap changers and tap leads, frame and case, are all ruggedly built.

**NEVER BEFORE SO MUCH PRACTICAL
HELP FOR ELECTRICAL ENGINEERS
IN A SINGLE VOLUME...**

There is the great standard reference work of all in the electrical engineering profession or whose work in industry or engineering touches on this field. Its 2303 pages present a handy-reference compilation of practical, usable data from all fields of electrical engineering practice, plus the most frequently required fundamental theory, units, and systems of measurement, made dependable by the work of more than 100 engineers, scientists, teachers, and other authorities.

STANDARD HANDBOOK for ELECTRICAL ENGINEERS

Prepared by a Staff of 102 Specialists

ARCHER E. KNOWLTON, Editor-in-Chief
Associate Editor for Engineering, *Electrical World*

7th edition, 2303 pp., 6x9, 1700 illus., 600 tables, \$8.00

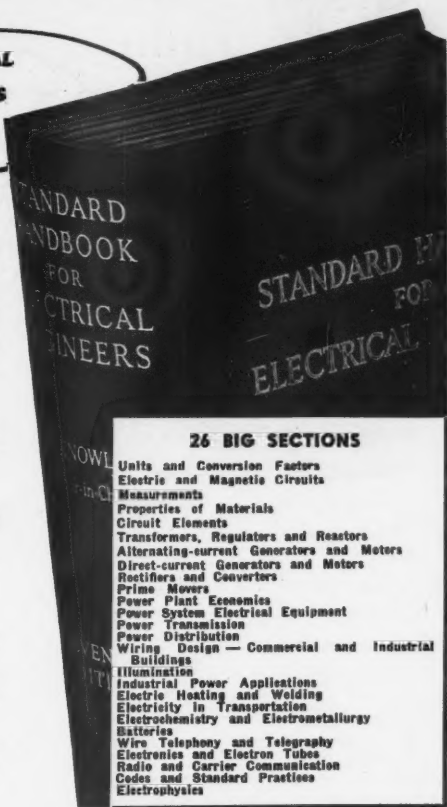
Now greatly improved in size and make-up as well as subject matter—revised from end to end—with new material, whole new sections added—more contributors—the Standard continues as the one indispensable reference tool of the electrical engineering profession.

DESIGNED TO USERS' SPECIFICATIONS

Previous to revision, a large number of users of past editions were consulted as to what they would like the new edition to be. As a result of their suggestions, this new edition contains such improvements as more emphasis on handy-reference compilation of usable facts, less historical material, and more data about equipment, materials, and practices, more sources of industry standards, codes and specifications, and expanded index, as well as complete revision of subject matter to keep abreast of current practice.

NEW 7th EDITION

- every section fully revised
- whole new sections; actually hundreds of pages of new material
- more contributors; every section treated by an expert
- new format; larger page, larger type, larger diagrams



WHAT THE NEW STANDARD GIVES YOU

- definitions, conversion factors, physical and mathematical principles
- accepted formulas and experimental data
- bases of design of electrical equipment for commercial performance
- principles and practice of assembling such apparatus into systems
- criteria and results in applying electricity in various industries, etc.
- the information you want in the form you can use it; the means of avoiding errors, saving time and trouble in procuring vital information, assuring yourself of best results in handling a wide variety of problems.

USE THIS CONVENIENT ORDER COUPON

PUBLIC UTILITIES FORTNIGHTLY, Munsey Bldg., Washington, D. C.
Please send me a copy of the new 7th edition of Standard Handbook for Electrical Engineers postpaid. I enclose \$8.00 in ☐ check ☐ money order ☐ cash.

Name
Address
City and State



Industrial Progress

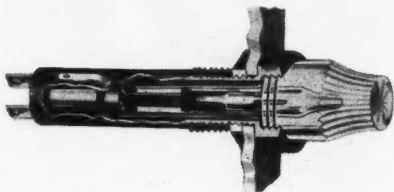
Selected information about manufacturers, new products, and new methods. Also news on utility expansion programs, personnel changes, recent and coming events.



Equipment Notes

Indicator Instantly Reports Circuit Break

A time, trouble, and money saving service is rendered to remote control by an indicator manufactured by Littelfuse Incorporated, 4757 Ravenswood Ave., Chicago, Ill. Listed as Littelfuse Panel Mounting, No. 1414, it is de-



Littelfuse Indicator Has Wide Application.

signed so that the light goes on only when the circuit is broken.

The value and dependability of this indicator is evidenced by its wide use in railway signaling equipment and aircraft applications. But it is equally applicable to any circuits, circuit breakers, line switches, etc.

When installed at any convenient or desirable point in connection with remote motor control it works instantly, with a plainly visible signal to show "on" or "off."

Complete information on applications of the Littelfuse Indicator may be obtained by addressing the manufacturer.

Blackout Flashlight Hood Quickly Reduces Light Beam

A blackout flashlight hood, made of woven fabric which reduces the beam of light to a faint glow is announced by the Blossom Manufacturing Co., 79 Madison Ave., New York. An elastic binding makes the hood fit various size flashlights. The hood can be put on and taken off within a split second.

Special Camouflage Paints

Of many developments in new camouflage products of interest to utility companies is a series of dark colored heat-deflecting paints. These special paints defy the infra-red lens which easily spots objects covered with ordinary paint. The new paint also maintains lower inside temperatures of sun-exposed objects whose surfaces are painted with them. De-

veloped in the West by research chemists of the Premier Oil & Lead Works, Los Angeles, these are permanent, durable paints which differ only in pigmentation adjustment from accepted exterior paints long manufactured by the same company.

New Straight Line Tap Changer With Silver to Silver Contacts

Retaining the fundamental and highly desirable principles of straight line movement, Pennsylvania Transformer Company of Pittsburgh, Pa., has introduced favorable improvements in its Tap Changer for power transformers.

According to the manufacturer, tests have proved that this new Tap Changer, featuring silver to silver contacts, is capable of carrying heavy overload without over-heating and is able to withstand "dead" short circuits without detrimental effects.

New Blackout Bulb Unit

Important changes in blackout bulb specifications are announced by the Wabash Appliance Corp., Brooklyn, N. Y., whose silver-lined blackout bulb placed on the market in early January was put through exhaustive blackout tests in actual city-wide blackouts in practically every state. Specification changes are based



Blackout Bulbs Provides Orange Light.

on the results of these tests, as well as on various official recommendations.

The most important specification change is in color of light from blue and red to the deep

Mention the FORTNIGHTLY—It identifies your inquiry



The SURVEYOR

A Specialized Body for Carrying Surveying Crews and Equipment

Six men in the compartment and two in the cab are carried in comfort and safety with transit, axes, and other equipment securely stored in compartments specially built for each.

Roomy seats with sturdy tubular frames are generously upholstered with imitation leather. Bus-type windows fitted with shadow-proof glass can be raised to seven positions. Compartment can be converted to carry more material by removing as many seats as necessary—Simply

pull out one pin and lift seat out.

All steel construction provides more room with greater strength, lighter weight,—saves gasoline and tires, and gives many years of dependable satisfactory service.

Write for literature

THE AMERICAN COACH & BODY CO.

Woodland Ave. at E. 93rd St., Cleveland, Ohio



AMERICAN



Public Utilities Equipment for Motor Vehicles

Equipment Notes (Cont'd)

orange recommended by the Office of Civilian Defense. Other changes are in size which is smaller, in reduced current consumption to 15 watts, in elimination of the former built-in reflector, and in the improved type of heavy black silicate coating to prevent light leakage.

The deep orange light that the new unit provides, is said to be ample to permit room occupants to see each other plainly, as well as furniture, doors and windows. The bulb will fit any household socket, and will list at 45¢.

New Asbestos Protective Suit

A new one-piece asbestos protective suit designed to provide instant and complete personal protection against flame hazards in emergencies, has been announced by Mine



One Piece Asbestos Suit Gives Complete Protection.

Safety Appliances Company, Pittsburgh, Pa.

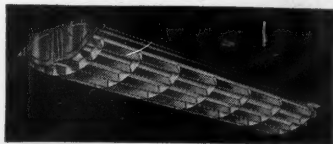
Where fire or explosion strike, with immediate action essential in saving life and property, the M.S.A. one-piece asbestos protective suit combines invaluable speed in application with utmost safety in use. The suit consists of an upper-and-lower durable asbestos garment securely sewed together, with helmet, gloves and boots attached to completely enclose and protect the wearer. The unit prevents the entry of flame, insulates against heat, guards the head from injury by falling or flying material and enables speedy and effective work at

the scene of emergency. A large window of heat-resistant glass in the hood permits unobstructed vision.

The M.S.A. asbestos-protective suit is made in a universal size only with tabs at each side and back to adjust length. For complete information, write direct to Mine Safety Appliances Company, Braddock, Thomas and Meade Streets, Pittsburgh, Pa. Ask for bulletin No. CF-7.

The New Shielded Guth Trucolite

The Guth trucolite, "King of Night" is now available with eggcrate louvres or diffusing glass bottom which permit strong down-



Eggcrate louvres Improve Unit.

light with comfortable shielding at all normal angles of vision. According to the manufacturer, Edwin A. Guth Co., St. Louis. The trucolite eggcrates are super-spotwelded to provide rugged "bridge-type" construction.

The trucolite's glass shield is prisms glass which efficiently diffuses and transmits the light yet presents a low-surface brightness. The glass shield is formed to the contour of the attractive trucolite ends and is rigidly held in a metal frame, braced by two strong rods.

Both the glass and eggcrate bottom trucolites have an exclusive "drop-hinge" for convenient relamping, cleaning and servicing.

New Fire-Extinguishing Compound

DuGas Engineering Corp., Marinette, Wis., has announced a new dry fire-extinguishing compound, duMag, a powder developed specifically for extinguishing magnesium and incendiary-bomb fires. The manufacturers claim its advantages over salt or sand to be these: Takes less to extinguish the fire, it is moisture-resistant, remains free-flowing even when stored for long periods, is non-abrasive, and will not react with burning magnesium. DuMag's claimed advantage over water-spray is that duMag will extinguish quickly, while water-spray is used to accelerate the fire and shorten burning time.

BLACKOUTS and other WAR MEASURES DEMAND PROTECTIVE LIGHTING

WHEAT

Rechargeable Spotlight

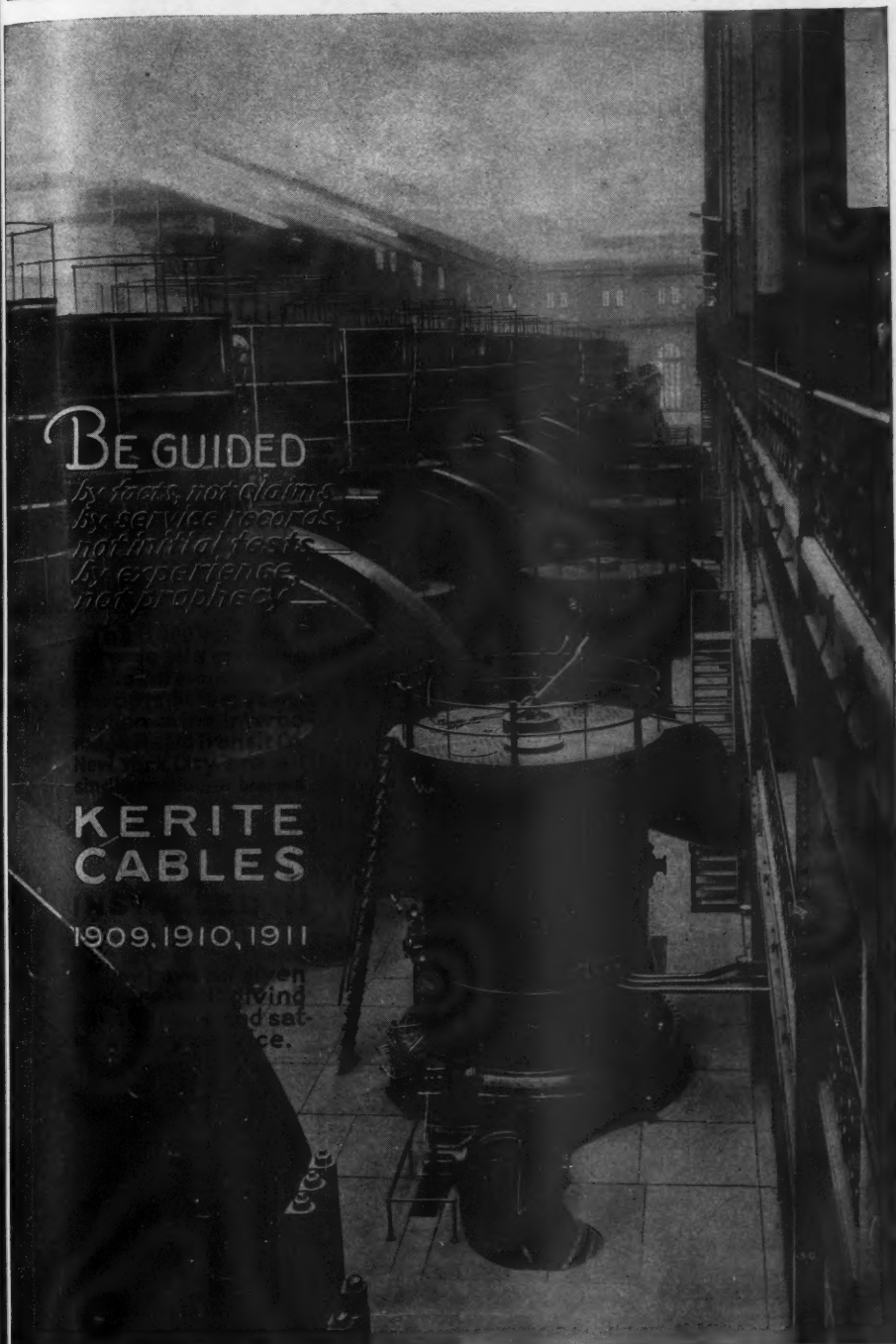
KOEHLER MFG. CO. Marlboro, Mass.

25,000 Beam C.P.
2,500 Ft. Beam
12 A.H.—4 Volt
Weight 6 lbs.
1,000 Hours
Battery Life



Mention the FORTNIGHTLY—It identifies your inquiry

APR. 23, 1942



BE GUIDED
*by facts, not claims,
 by service records,
 not initial facts,
 by experience,
 not prophecy.*

KERITE CABLES

1909, 1910, 1911

When
 solving
 and sat-
 isfaction.

Equipment Notes (Cont'd)**Air-Cooled Transformer Aids Industrial Plants**

The Acme Electric & Manufacturing Company of Cuba, New York, has announced a new line of air-cooled industrial transformers which provide the most economical, and quickest way of preparing a plant for a 24-hour day. By the installation of air-cooled transformers, only one general wiring system is required instead of a power line for motor applications and a separate lighting circuit.

The installation of additional equipment or power driven machinery in a plant often overtaxes the capacity of the feeder circuits or main lines to such an extent that complete re-wiring is planned. In place of expensive re-wiring, the change-over of the main transformers to a higher voltage, and the installation of air-cooled transformers at the machines or on feeder installation of air-cooled transformers at the machines or on feeder circuits permit almost continuous production.

The new 2400 volt primary Acme air-cooled transformers are now available in sizes from 1.5 kva in singlephase design and from 3 kva



Air-Cooled Transformer Has Safety Features.

to 50 kva three phase design. These transformers can also be furnished in three phase designs with primaries of 240/480 and 600 volt in sizes from 3 kva to 50 kva. The 2400 volt primary transformers are designed with 5 per cent taps in sizes from 5 kva to 50 kva. This will allow for voltage correction to compensate for voltage-drop where lines are carried over an extended area.

70 MASTER-LIGHTS

- Electric Portable Hand Lights.
- Repair Car Spot and Searchlights.
- Emergency (Battery) Floodlights.

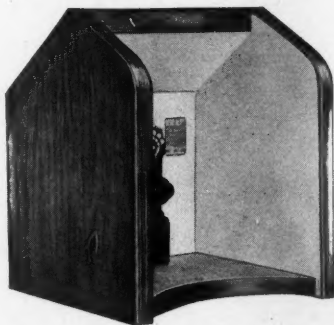
CARPENTER MFG. CO.

179 Sidney St., Cambridge, Mass.
MASTER-LIGHT MAKERS

Acousti-Booth Useful In Limited Spaces

A new half size Burgess Acousti-Booth, "Scout" Model 601, is announced by the Burgess Battery Company, 2825 W. Roscoe St., Chicago.

Like other Burgess Acousti-Booths now available, it is constructed entirely of wood in



Half Size Phone Booth Built of Wood.

order to save critical materials. This particular model is designed especially for use where noise conditions are mild or where space is limited. It gives telephone users quiet and privacy for telephoning, plus the convenience of use common to all shelf or wall type telephone booths.

Manufacturers Notes**Herrington on Mission to India**

A. W. Herrington, president of Marmon-Herrington Co. and Society of Automotive Engineers, has been appointed technical adviser on the current American diplomatic and economic mission to India, headed by Col. Louis Johnson, the first U. S. Minister to India. The mission faces the gigantic task of organizing the potential producing power of India to supply arms and munitions to the armies of China and the other allied forces in the Orient.

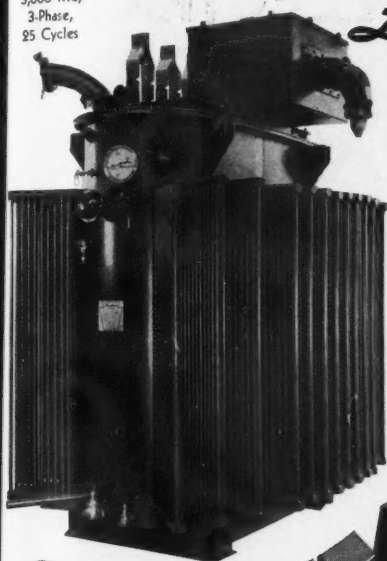
Mr. Herrington's intimate knowledge of conditions in the Near and Far East, where he has spent perhaps a third of his time during the past ten years, plus his acknowledged leadership in the design and production of All-Wheel-Drive military trucks, track-laying artillery tractors, combat tanks and other vehicles of war, makes him a logical choice for this important mission.

G-E Donates Outdoor Space For War Bond Posters

In the interest of promoting the sale of U. S. War Bonds, General Electric Company's appliance and merchandise department has do-

Mention the FORTNIGHTLY—It identifies your inquiry

3,000 Kva,
3-Phase,
95 Cycles



Pennsylvania

ASKAREL non-inflammable TRANSFORMERS

Like all Pennsylvania Transformers, ASKAREL Transformers are equipped with Circular Coils. In non-inflammable transformers there are many fundamental reasons why. . .

CIRCULAR COILS

...make the big difference

Balanced

Section
Through
Coil



Horizontal



Vertical

The circular coil is practically balanced, radially and axially, against short circuit stresses.

When a transformer is subjected to heavy overload or short circuit, the circular coil maintains its shape even without the use of compound or varnish. By eliminating such stresses, the coil is not strained, and the insulation is not injured.

In regular oil cooled transformers, varnish is used to increase the mechanical and electrical strength of the transformer coils, irrespective of the shape of the coils. This kind of varnish, however, cannot be used to treat coils in a transformer where non-inflammable liquids are employed. Therefore, without the aid of this varnish, it is imperative that the coils in a non-inflammable transformer have *great inherent strength*.

CIRCULAR COILS POSSESS THE MAXIMUM INHERENT MECHANICAL AND ELECTRICAL STRENGTH.

1. In a circular coil the tension of each turn of wire is uniform throughout its length. No coil of any other shape possesses this quality.
2. The turns in a circular coil are wound tightly without excessive tension on the wire — thus eliminating the possibility of stretching the wire and injuring the insulation.

Pennsylvania ASKAREL Transformers offer you the convenience and economy of indoor installations near the load centers, plus the added safety inherent in the Pennsylvania circular coil construction.

Pennsylvania TRANSFORMER COMPANY

808 RIDGE AVENUE, • N. S., PITTSBURGH, PA.

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Manufacturers Notes (Cont'd)

nated to the Treasury Department the use of a number of outdoor billboards for Bond posters.

McIlhenny Named G-E Air Conditioning Sales Manager

J. P. McIlhenny has been appointed sales manager of the General Electric air conditioning and commercial refrigeration department.

Mr. McIlhenny has had a long career in distributor and dealer selling operations. Previous to joining G-E Supply Corp. in Chicago, he was sales manager for the Elliot-Lewis Electric Company, General Electric independent appliance distributor in Philadelphia. Recently he has been sales manager of the wiring materials sales section field organization, with headquarters in Bridgeport.

Catalogs and Bulletins**Electrical Instruments**

For central station, industrial, laboratory, and general use, portable switchboard and miniature panel instruments are described in a new 34-page booklet announced by Westinghouse Electric and Mfg. Co.

The new publication lists all instrument types for specific applications on an instrument selector chart. Special features, specification data, and full-scale range of standard ratings are included.

Design features and physical characteristics of meter pivots, springs, pointers, and cases are described with a note on manufacturing methods and testing facilities are also included.

Reproduced in the booklet are 120 photographs, 44 representative meter dials and 13 types of strip and circular charts.

A copy of booklet B-3013 may be secured from department 7-N-20, Westinghouse Electric and Mfg. Co., East Pittsburgh, Pa.

Modern Switchboards

Modern switchboards, standardized in design for economy, yet custom-built to fit individual needs, are described in a new bulletin (B-6149) released by the Allis-Chalmers Mfg. Co.

Complete descriptions of vertical panels duplex panels, benchboards, control desks and standard and special switchboards are included.

DICKE TOOL CO., Inc.
DOWNERS GROVE, ILL.
Manufacturers of
Pole Line Construction Tools
They're Built for Hard Work

ELECTRIC SYSTEM HANDBOOK

A complete manual of central station practice

Editor-in-Chief
CLARENCE H. SANDERSON

Asst. Electrical Engineer,
The New York Edison Co.; Fellow, American Institute of Electrical Engineers.

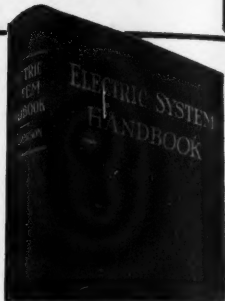
Assisted by a Staff of
Electrical Engineering Experts

1131 pages, 5 x 8
flexible
illustrated
\$5.00

Here is a complete guide to the design, operation and maintenance of electric systems, covering every phase of the subject from the generation of electricity to its distribution.

Thorough; Practical

The book answers the demand for a practical handbook which will tell the story of the electric system as a whole—beginning with the fundamentals of electricity and generation and carrying on through transformation, transmission, power lines, design, construction, operation, repair, inspection substations, etc. The text is written in the language of the everyday workman. Higher mathematics is entirely omitted and all technical expressions are fully explained.

**Section Headings**

1. Electrical Energy and its Transmission
2. Auxiliary Electrical Equipment.
3. Switchboards
4. Motors
5. Generating Stations
6. The Transmission System
7. Alternating Current Substations
8. Railway Substations
9. Direct Current Substations for Light and Power
10. Distribution
11. Protection of Electrical Apparatus, Circuits and Systems
12. Inspection and Maintenance
13. Electrical Engineering Tables
14. Standard Definitions of Electrical Words and Terms

Send check, money-order or cash to

PUBLIC UTILITIES FORTNIGHTLY

MUNSEY BLDG., WASHINGTON, D. C.

Mention the FORTNIGHTLY—It identifies your inquiry

98.2% of 53,144 Harvester Employees Are Buying War Savings Bonds Regularly

THE WINNING of this grimmest of all wars, as every citizen knows, calls for a triple-offensive against a powerful enemy. Americans must *fight* the war, *build* the production, and *FINANCE* the Victory. Let two—or even *one*—of these objectives fail and the cause is lost.

International Harvester, therefore, takes the keenest pleasure in announcing, in behalf of its employees, an outstanding participation in the purchase of United States Savings Bonds.

More than 98.2% of Harvester men and women all over America—52,187 of them as this statement goes to press—are buying shares in America and a financial interest in the Victory America fights for. They believe it's the best investment their money can buy.

Today, almost all operating units of International Harvester—thanks to these loyal and patriotic employees—hold the Treasury Department's special merit certificate.

The Harvester Company was one of the first organizations in the nation to be designated by the Treasury Department as an issuing agent for the sale of Defense Bonds, Series E. It has made available to employees, for this purpose, the machinery of the Employees Savings Plan which was already in full operation. In addition the company provides a safe-keeping service under which all bonds purchased are deposited with designated custodian banks and held subject to the order of the employee-owners.

The response in the Harvester organization has been an inspiration from the outset.

Harvester men and women are buying a bigger and bigger share in America—buying not just once, but regularly.

Harvester people, building an ever-increasing volume of war materials on their daily jobs, have seen 2500 of their number off to fight the war itself. Their spirit and their will, expressed in ACTION, give assurance that America's all-out drive for Victory and Freedom **SHALL NOT FAIL**.



**BUY
A SHARE
IN
AMERICA**

**Defense Bond
Buyers 100% in these
Harvester operations:**

Auburn Works
Benham Coal Mines
Canton Works
East Moline Works
General Office
Harvester Press
Iron Mines
McCormick Twine Mill
Milwaukee Works
Richmond Works
Rock Falls Works
St. Paul Works
West Pullman Works
and 113 of the International
Sales and Service operations

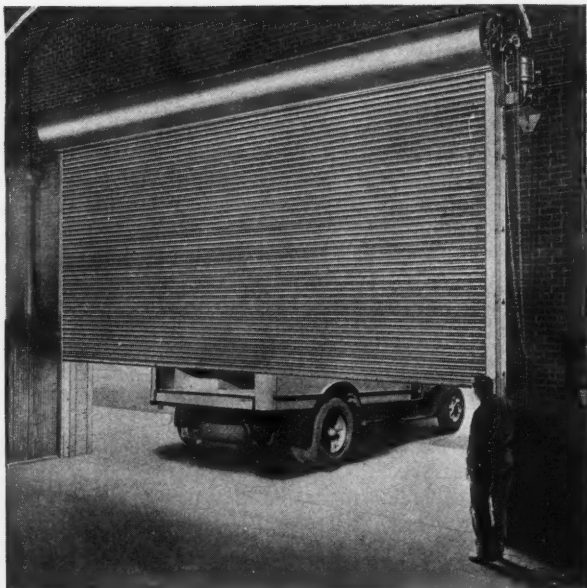


INTERNATIONAL HARVESTER

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

BETTER DOOR SERVICE

with less servicing!



You get more than the space-saving convenience of compact, coiling operation in Kinnear Rolling Doors. They also give you an extra measure of lasting, trouble-free service. Their rugged interlocking steel-slat construction, special ball-bearing action, highly effective counterbalance, strong steel jamb guides and other heavy-duty features assure money-saving durability. And they open out of reach of damage from wind, weather or vehicles, avoiding many a costly repair job that ordinary doors often make necessary. For extra years of *low cost* service, install Kinnear Rolling Doors.

PROTECTION, TOO!

The strong, all-steel, interlocking-slat curtain of the Kinnear Rolling Door defies intruders and saboteurs; gives extra fire protection; resists storm damage—and even closes light-tight whenever blackout precautions are necessary; Kinnear Rolling Doors are built in any size, for all openings in either old or new buildings. Write for complete details or recommendations today!

THE KINNEAR MFG. CO., 2060-80 Fields Ave., Columbus, Ohio

WRITE FOR NEW KINNEAR CATALOG!



With Kinnear Motor Operators, the doors can be opened and closed from any number of convenient points!



This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

23, 1942

CE

an the
ience of
operation
g Doors.
an extra
trouble-
rugged
at con-
all-bear-
effective
ong steel
other
s assure
ability.
of reach
wind,
s, avoid-
repair job
rs often
or extra
ervice, in-
g Doors.

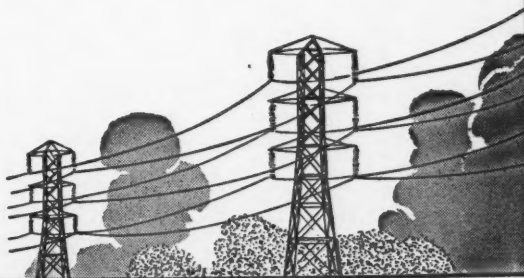
ear Motor
he doors can
and closed
mber of con-
ts!

R
S

ent)



Transmission line construc-
tion costs can be materially
reduced and completion ex-
pedited by using
Hoosier Crews



HOOSIER ENGINEERING COMPANY

CHICAGO

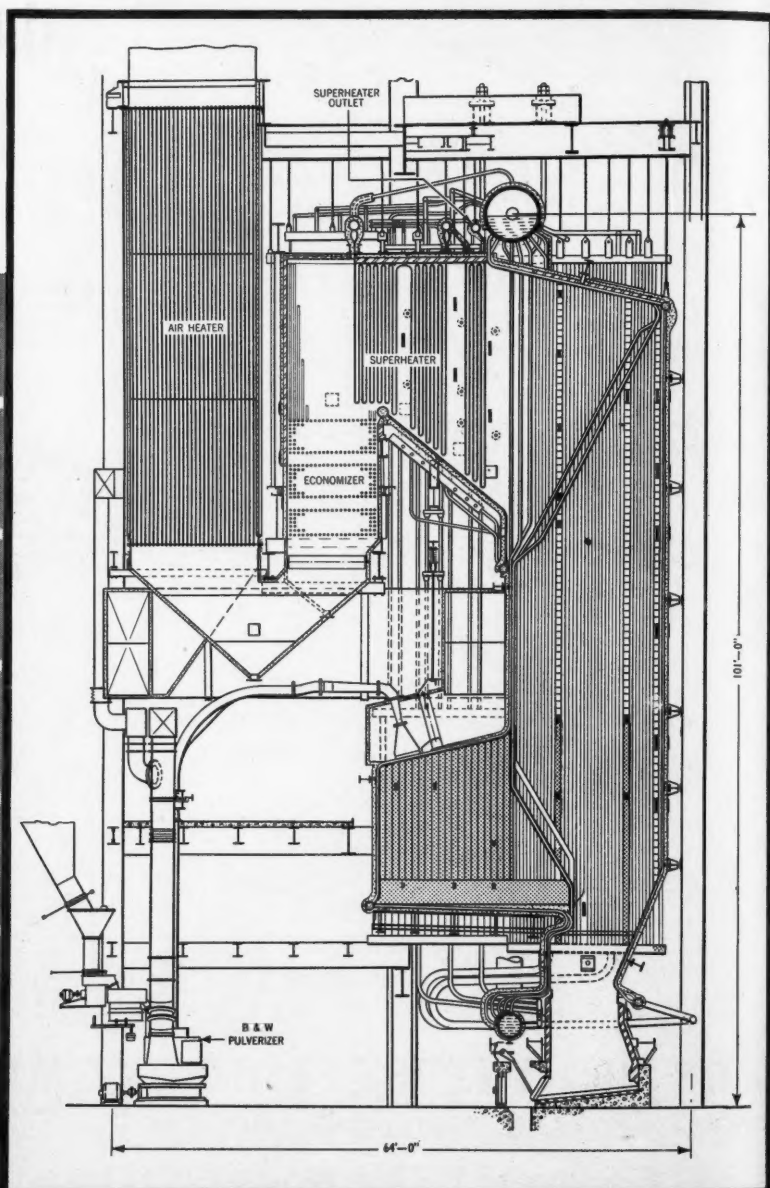
46 SO. 5TH ST., COLUMBUS, OHIO

NEW YORK

ERECTORS OF TRANSMISSION LINES

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

52 B & W



This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Radiant Boilers

ordered to date

21,000,000 lb. steam

per hour

Combined Capacity

FUELS—

Pulverized Coal

Oil and Gas

Oil, pulverized coal in future

Gas, oil, or acid sludge, with possibility of
pulverized petroleum coke in future

CAPACITIES—

60,000 to 900,000 pounds of steam per hour

PRESSURES—

525 to 1525 pounds per square inch

STEAM TEMPERATURES—

800 to 950 degrees Fahrenheit

THE BABCOCK & WILCOX COMPANY

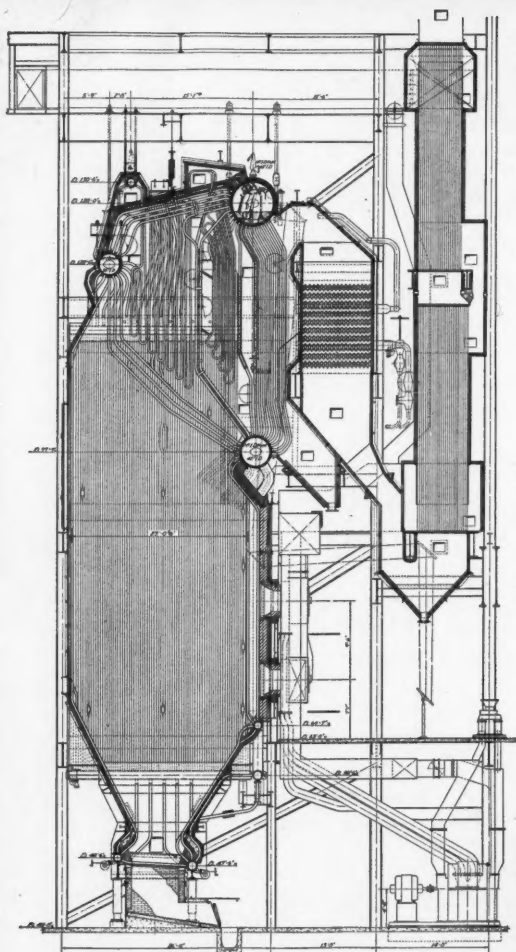
85 LIBERTY STREET NEW YORK, N. Y.

BABCOCK & WILCOX

G-202TA

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

RILEY STEAM GENERATING UNIT



TWO RILEY UNITS FOR UNION ELECTRIC CO. OF ILL. VENICE STATION

Stone & Webster Engineering Corp.
Engineers.

370000 Pounds of Steam/Hour
1000 lbs. Design Pressure
915° F. Steam Temperature

86.4% EFFICIENCY

Riley Boiler, Superheater, Steam Temperature Control, Economizer, Air Heater, Water Walls, Steel Clad Insulated Setting. Fired by Riley Pulverizers and Burners.

RILEY STOKER CORPORATION

WORCESTER, MASS.

BOSTON NEW YORK PHILADELPHIA PITTSBURGH BUFFALO CLEVELAND DETROIT SEATTLE
ST. LOUIS CINCINNATI HOUSTON CHICAGO ST. PAUL KANSAS CITY LOS ANGELES ATLANTA

COMPLETE STEAM GENERATING UNITS

BOILERS - SUPERHEATERS - AIR HEATERS - ECONOMIZERS - WATER-COOLED FURNACES
PULVERIZERS - BURNERS - MECHANICAL STOKERS - STEEL-CLAD INSULATED SETTINGS

This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

DAVEY TREE TRIMMING SERVICE



1846

1923

JOHN DAVEY

Founder of Tree Surgery

What's Cookin'?

Building good will is like cooking. It has to be continued day after day. And like cooking it may vary in quality. You may be sure of building good will with Davey men.

Always use dependable Davey Service

DAVEY TREE EXPERT CO.

KENT, OHIO

DAVEY TREE SERVICE

INSIST ON

Parsons

Papers

FOR YOUR

Forms
Records
Stationery

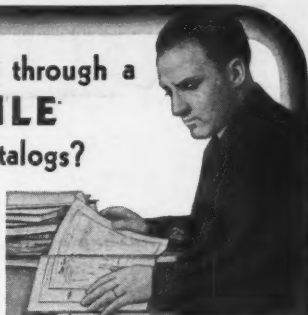
Superior Quality

MADE FROM COTTON FIBERS

PARSONS PAPER CO.
HOLYOKE · MASSACHUSETTS

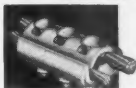
Why dig through a PILE of Catalogs?

Find the
Fitting
you need,
quickly—



in the COMPLETE line

If you have a Penn-Union Catalog, you can instantly find practically every good type of conductor fitting. These few can only suggest the variety:



Universal Clamps to take a large range of conductor sizes; with 1, 2, 3, 4 or more bolts.

L-M Elbows, with compression units giving a dependable grip on both conductors. Also Straight Connectors and Tees with same contact units.



Bus Bar Clamps for installation without drilling bus. Single and multiple. Also bus supports—various types.

Clamp Type Straight Connectors and Reducers, Elbows, Tees, Terminals, Stud Connectors, etc.



Jack-Knife connectors for simple and easy disconnection of motor leads, etc. Spring action—self locking.

Vi-Tite Terminals for quick installation and easy taping. Also sleeve type terminals, screw type, shrink fit, etc. etc.



Splicing Sleeves, Figure 8 and Oval, seamless tubing—also split tinned sleeves. High conductivity copper; close dimensions.

Preferred by the largest utilities and electrical manufacturers—because they have found that "Penn-Union" on a fitting is their best guarantee of Dependability. Write for Catalog.

PENN-UNION ELECTRIC CORPORATION
ERIE, PA.

Sold by Leading Jobbers

PENN-UNION

CONDUCTOR FITTINGS

PROFESSIONAL DIRECTORY

• This Directory is reserved for engineers, accountants, rate experts, consultants and others equipped to serve utilities in all matters relating to rate questions, appraisals, valuations, special reports, investigations, financing, design and construction.

THE AMERICAN APPRAISAL COMPANY

INVESTIGATIONS, APPRAISALS AND STUDIES

for

ACCOUNTING AND REGULATORY REQUIREMENTS

NEW YORK WASHINGTON CHICAGO MILWAUKEE SAN FRANCISCO
and other principal cities

DAY & ZIMMERMANN, INC.

ENGINEERS

NEW YORK

PHILADELPHIA
PACKARD BUILDING

CHICAGO

DESIGN
CONSTRUCTION
OPERATING COSTS

Ford, Bacon & Davis, Inc.

Engineers

RATE CASES
APPRAISALS
INTANGIBLES

VALUATIONS AND REPORTS

NEW YORK PHILADELPHIA WASHINGTON CLEVELAND CHICAGO

J. H. MANNING & COMPANY

120 Broadway
New York

ENGINEERS

Field Building
Chicago

Business Studies
New Projects
Consulting Engineering

Purchase—Sales
Management

Valuations
Reorganizations
Mergers

Public Utility Affairs including Integration

SANDERSON & PORTER

ENGINEERS AND CONTRACTORS

Design and Construction of Industrials
and Public Utilities.

Reports and Appraisals in Connection

With Management Problems, Financing, Reorganization.

Chicago

New York

San Francisco

Mention the FORTNIGHTLY—It identifies your inquiry

PROFESSIONAL DIRECTORY (continued)

Sargent & Lundy

ENGINEERS

*Steam and Electric Plants**Utilities—Industrials**Studies—Reports—Design—Supervision*

Chicago

STONE & WEBSTER ENGINEERING CORPORATION

DESIGN AND CONSTRUCTION

REPORTS • CONSULTING ENGINEERING • APPRAISALS

BOSTON • NEW YORK • CHICAGO • HOUSTON • PITTSBURGH
SAN FRANCISCO • LOS ANGELES**THE J. G. WHITE ENGINEERING CORPORATION**

ENGINEERS AND CONSTRUCTORS

Steam Power, Hydroelectric and Industrial Plants

Examinations, Reports and Appraisals

NEW YORK

NEW ORLEANS

BARKER & WHEELER, ENGINEERSDESIGNS AND CONSTRUCTION — OPERATING
BETTERMENTS — COMPLETE OFFICE SYSTEMS —
MANAGEMENT — APPRAISALS — RATES11 PARK PLACE, NEW YORK CITY
36 STATE STREET, ALBANY, N. Y.**EARL L. CARTER***Consulting Engineer*REGISTERED IN INDIANA, NEW YORK, OHIO,
PENNSYLVANIA, WEST VIRGINIA, KENTUCKY*Public Utility Valuations, Reports and
Original Cost Studies.*

910 Electric Building Indianapolis, Ind.

BLACK & VEATCH

CONSULTING ENGINEERS

Appraisals, investigations and re-
ports; design and supervision of con-
struction of Public Utility Properties

4706 BROADWAY KANSAS CITY, MO.

ROBERT E. FOLEY*Erecting Engineer*Telephone Lines—Rural Lines—Fire Alarms—
Transmission Lines

48 Griswold St.

Binghamton, N. Y.

**H. T. CANFIELD
ENGINEERING ASSOCIATES**Economic and Business Reports
Investigations, Valuations, Cost Studies, Rates
Regulatory Problems and Proceedings

61 BROADWAY

NEW YORK

**FRANCIS S. HABERLY
ENGINEER***Appraisals—Original Cost Accounting—
Rates—Depreciation—Trends*

122 SOUTH MICHIGAN AVENUE, CHICAGO

(Professional Directory Concluded on Next Page)

PROFESSIONAL DIRECTORY (concluded)

JACKSON & MORELAND
ENGINEERSPUBLIC UTILITIES—INDUSTRIALS
RAILROAD ELECTRIFICATION
DESIGN AND SUPERVISION VALUATION
ECONOMIC AND OPERATING REPORTS

BOSTON

NEW YORK

SLOAN & COOK
CONSULTING ENGINEERS120 SOUTH LA SALLE STREET
CHICAGOAppraisals—Original Cost Studies
Depreciation, Financial, and Other Investigations**JENSEN, BOWEN & FARRELL**
Engineers

Ann Arbor, Michigan

Appraisals - Investigations - Reports
in connection with
rate inquiries, depreciation, fixed capital
reclassification, original cost, security issues**J. W. WOPAT**

Consulting Engineer

Construction Supervision
Appraisals—Financial
Rate Investigations

1510 Lincoln Bank Tower Fort Wayne, Indiana

Faith IN THE *Future*
OF MODERN METERING

Faith in the future, and the co-operation of the electric utility industry with the watthour meter manufacturers, has kept the design and development of the modern watthour meter well ahead of metering requirements. Thanks to this faith and cooperative spirit, the meters built today are fully capable of meeting load conditions for some time to come. When normal times are once more restored, as they are sure to be, watthour meters will again play their important part in system modernization.

**SANGAMO ELECTRIC COMPANY**

SPRINGFIELD - ILLINOIS

Mention the FORTNIGHTLY—It identifies your inquiry

FIRST LAST

*Say it for the last time—the first time
with DITTO*

Check your own routines. You'll see that they are largely a hand-made, repetitive job. And today that job is complicated and slowed up by two conditions—trained help becomes scarcer, and the need for quick, accurate figures is even more pressing.

What's the answer? Thousands say, "DITTO'S MISTAKE-PROOF, INSTANT-ACTION METHODS!"

With Ditto in charge of your operating statements, payroll, and reporting routines, NOTHING EVER IS RE-WITTEN. You write it—ONCE—and that's the end of it.

Human and machine errors are impossible. The wanted data is complete. The routines go through, as a rule, in *half* the time...and that's the answer to today's needs!...Get the answer! Mail the coupon now—while you're thinking about it.



Send coupon for fascinating booklets, "The New Trend in Accounting," and "Copies, Their Place in Business"—a profitable move for any executive!

DITTO

DITTO, Inc.

673 S. Oakley Blvd., Chicago

Gentlemen: Without obligation please send me:

() Data on Ditto Utilities Methods

() Arrange a Ditto demonstration for me

My Name

Company

Address

City County State

INDEX TO ADVERTISERS

[The Fortnightly lists below the advertisers in this issue for ready reference. Their products and services cover a wide range of utility needs.]

A

*Aluminum Co. of America	
American Appraisal Company, The	48
American Coach & Body Co., The	35

B

Babcock & Wilcox Co.	44-45
Barber Gas Burner Company, The	3
Barker & Wheeler, Engineers	49
Bayer Company, The	28
Black & Veatch, Consulting Engineers	49
*Brown, L. L., Paper Co.	
Burroughs Adding Machine Co.	13

C

Canfield, H. T., Engineering Associates	49
Carpenter Manufacturing Company	38
Carter, Earl L., Consulting Engineer	49
*Cities Service Petroleum Products	
Cleveland Trencher Company, The	26
Combustion Engineering Company, Inc.	16-17
Connelly Iron Sponge & Governor Co.	23
Crescent Insulated Wire & Cable Co., Inc.	7

D

Davey Tree Expert Company	47
Day & Zimmermann, Inc., Engineers	48
Dicke Tool Company, Inc.	40
Ditto, Incorporated	51

E

Egry Register Company, The	18
Ehret Magnesia Mfg. Co.	29
Electric Storage Battery Company, The	27
Elliott Company	32
*Ethyl Gasoline Corporation	

F

Foley, Robert E., Erecting Engineer	49
Ford, Bacon & Davis, Inc., Engineers	48

G

General Electric Company	Outside Back Cover
Grinnell Company, Inc.	30

H

Haberly, Francis S., Engineer	49
Hoosier Engineering Company	43

I

International Business Machines Corp.	19
International Harvester Company, Inc.	41
I-T-E Circuit Breaker Co.	Inside Front Cover

Professional Directory

J

Jackson & Moreland, Engineers	50
Jensen, Bowen & Farrell, Engineers	50
Johns-Manville Corporation	21

K

Kerite Insulated Wire & Cable Co., Inc., The	37
Kinnear Manufacturing Company, The	42
Kochler Manufacturing Company	36
Kuhlman Electric Company	Insert at page 33

M

Manning, J. H. & Company, Engineers	48
*Marmon-Herrington Co., Inc.	
Mercé Nordstrom Valve Company	24
Mercoid Corporation, The	25

N

Neptune Meter Company	31
Newport News Shipbuilding & Dry Dock Company	20

P

Parsons Paper Company	47
Pennsylvania Transformer Company	39
Penn-Union Electric Corporation	47
Pittsburgh Equitable Meter Company	24

R

Railway & Industrial Engineering Company	15
Recording & Statistical Corp.	Inside Back Cover
Remington Rand, Inc.	9
Ridge Tool Company, The	5
Riley Stoker Company	46
Robertshaw Thermostat Company	22

S

Sanderson & Porter, Engineers	48
Sangamo Electric Company	50
Sargent & Lundy, Engineers	49
Sloan & Cook, Consulting Engineers	50
Sprague Meter Company, The	23
Stone & Webster Engineering Corporation	49

T

*Timken-Detroit Axle Co., The	
*Todd Combustion Equipment, Inc.	

V

Vulcan Soot Blower Corp.	11
-------------------------------	----

W

White, J. G., Engineering Corporation, The	49
Wopat, J. W., Consulting Engineer	50

48-50

*Fortnightly advertisers not in this issue.

1942

50
50
21

37
42
36
ge 33

48
24
25

31
m-
20

47
39
47
24

15
Cover
9
5
46
22

48
50
49
50
23
49

11

49
50



I

V

th
ce
in

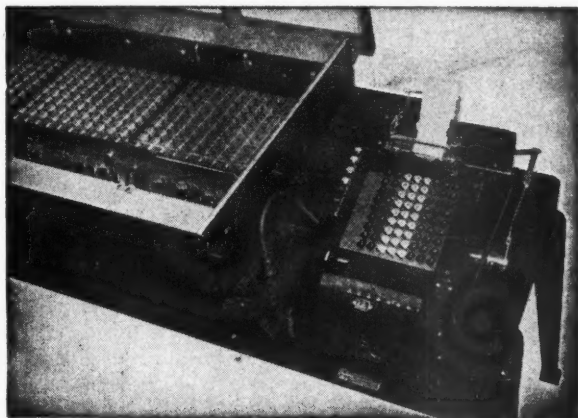
T
of
tr
sp
a
W
ec
W

So

2

SAVE 50% IN TIME AND MONEY WITH

THE ONE-STEP METHOD



OF BILL ANALYSIS

WHAT effect is the national defense program having on your bill distribution? Analysis of customer usage data will provide the answer to this important question. In addition to a knowledge of the existing situation, certain trends may be disclosed, a knowledge of which may be of considerable importance to you under circumstances where the picture is rapidly changing.

The One Step Method of Bill Analysis is ideally suited to meet the needs of this problem. It does away with the necessity for temporarily acquiring, training and supervising a large clerical force. Our experienced staff plus our specially designed Bill Frequency Analyzer machines can turn out the job in a few days and at the cost of only a small fraction of a cent per item.

We will be glad to tell you more in detail about this accurate, rapid and economical method for obtaining a picture of your customer usage situation. Write for a copy of the booklet "*The One Step Method of Bill Analysis*."

Recording & Statistical Corporation

Utilities Division

102 Maiden Lane, New York, N. Y.

Boston

Chicago

Detroit

Montreal

Toronto

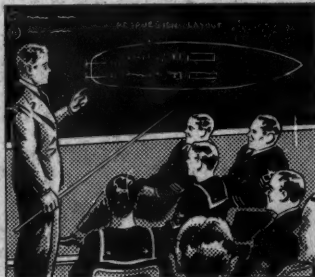
This page is reserved under the MSA PLAN (Manufacturers Service Agreement)

Navy School at G.E.

Just one evidence of the cooperation between the armed services and our vast industrial army—a school for submarine electricians conducted at one General Electric factory.



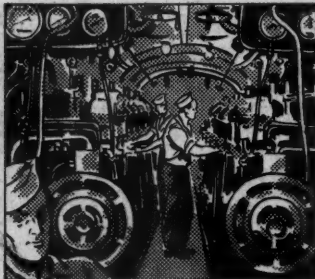
1. Electricity is vital to the running of every submarine. It does an amazing variety of important jobs, from turning the propeller to cooking the coffee.



2. For that reason, there must be well-trained electricians on every underwater craft. At this school, Navy electricians attend classes taught by G-E engineers



3. and go out into the shops where they watch workmen construct the same kind of electric equipment that will some day be put in their charge.



4. This is but one proof of the thorough training which the U.S. Navy gives its men, so that the vital equipment of war will always be ready for action.

General Electric believes that its first duty as a good citizen is to be a good soldier.

General Electric Company, Schenectady, N. Y.

969-10-211

GENERAL  ELECTRIC